PHYTOPLANKTON OF LAKES IN THE MUSKOKA–HALIBURTON AREA

L. Nakamoto, L. Heintsch, and K. Nicholls

DATA REPORT DR 83/8

DATA REPORT SERIES

The data presented in this report were collected by staff of the Water Resources Branch of the Ontario Ministry of the Environment as part of the Lakeshore Capacity Study or the Acid Precipitation in Ontario Study. This unreviewed report does not necessarily reflect the views or opinions of the Ontario Ministry of the Environment

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— : Ont. Min. of Environment

DATA REPORT DR 83/8

PREFACE

The unpublished Data Report Series is intended as a readily available source of basic data collected for lakes and watersheds in the Muskoka-Haliburton area of Ontario. These data were collected as part of the Lakeshore Capacity Study and/or the Acid Precipitation in Ontario Study.

The limnological portion of the Lakeshore Capacity Study (1975-81) was initiated to investigate the relationships between lakeshore development and lake trophic status in low ionic strength Precambrian lakes. The Acid Precipitation in Ontario Study (1979-present) was initiated, in part, to investigate the effects of the deposition of strong acids on aquatic and terrestrial ecosystems in Ontario. The primary findings of these studies have been and will continue to be published as reviewed papers and technical reports.

ABSTRACT

Phytoplankton biomass of the dominant classes and genera is presented for 16 lakes in the Muskoka-Haliburton area of south-central Ontario. Biomass (or biovolumes) is given both as an annual maximum and as seasonal plots for the May to November periods of 1976 to 1979.

Nakamoto, L., L. Heintsch, and K. Nicholls. 1983. Phytoplankton of lakes in the Muskoka-Haliburton area. Ont. Min. Envir. Data Report DR 83/8.

Introduction

An objective of the phytoplankton component of the trophic status section of the Lakeshore Capacity Study was to determine if lakewater phosphorus concentrations and other physical-chemical variables were related to characteristics of the lakes' phytoplankton. Of special interest were total phytoplankton biomass (cell volume) and taxa of particular relevance to efficient food chain function (e.g. small unicellular forms) and others which are known to be very inefficient in aquatic food webs and which also impair aesthetic enjoyment and water use (e.g. large, colonial and toxic blue-green algae).

The rationale, objectives and relationship of this investigation to other components of the Lakeshore Capacity Study and to other published studies is presented in more detail in a report nearing completion. The purpose of this Data Report is to provide the most important part of the phytoplankton data set from the four-year (1976-79) study of the 16 Muskoka-Haliburton lakes in a form (tables and graphs of dominant genera and classes) which may be utilized by others undertaking limnological investigations of these lakes or other lakes in the area. The locations and morphometry of the 16 lakes for which phytoplankton data are provided were given in Nicolls et al. (1983). For comparative purposes, data from a eutrophic hardwater system (Bay of Quinte near Belleville) and an acidified Sudbury area lake (Clearwater Lake) have been included in part of the data summary.

Methods

Phytoplankton samples were collected as volume-weighted composites of the euphotic zones. Full details were given in Scheider et al. (1983).

Samples were fixed in the field with Lugol's iodine solution (containing glacial acetic acid) and returned to the Toronto Laboratory for preparation and analyses. Details of sample analyses (using inverted microscopes) were given in Nicholls and Carney (1979). Subsamples (concentrated) of all collections have been catalogued and retained (preserved with formalin) in the Taxonomy Unit's permanent repository.

The next 24 pages (pp.3-27) contain a listing of dominant genera arranged by class. The numbers indicate the arithmetic mean of the three highest biomasses (or biovolumes) for the year in mm^3/m^3.

Note: Chrysochromulina spp (Prymnesiophyceae) have been included in the Chrysophyceae for convenience and not for any taxonomic reasons.

Year	Class	Page
1976	Cyanophyceae/Dinophyceae	3
	Cryptophyceae/Euglenophyceae/Chrysophyceae	4
	Chlorophyceae	5
	Bacillariophyceae/Xanthophyceae	8
1977	Cyanophyceae/Dinophyceae	9
	Cryptophyceae/Euglenophyceae/Chrysophyceae	10
	Chlorophyceae	11
	Bacillariophyceae/Xanothophyceae	14
1978	Cyanophyceae/Dinophyceae	15
	Cryptophyceae/Euglenophyceae/Chrysophyceae	16
	Chlorophyceae	17
	Bacillariophyceae/Xanthophyceae	20
1979	Cyanophyceae/Dinophyceae	21
	Cryptophyceae/Euglenophyceae/Chrysophyceae	22
	Chlorophyceae	23
	Bacillariophyceae/Xanthophyceae	26

1976	[Clearwater]	Basshaunt	Bigwind	Blue Chalk	Buck	Chub	Crosson	Dickie	Glen	Gullfeather	Harp	Jerry	Little Clear	Red Chalk (east)	Red Chalk (main)	Solitaire	Walker	[Bay of Quinte (B)
	max. (mm^3/m^3)																	
CYANOPHYCEAE																		
Anabaena		8	4	22							42		0.2		22	14		5826
Aphanizomenon						1			1									2679
Aphanocapsa			0.5	1	0.5	1		0.2		0.2	5	0.3			5	0.2	1	2
Aphanothece	0.5	1	1	4	1	1	0.5	4	12	1	8	2	0.5		10	4	1	30
Chroococcus		0.5	0.5	15	30	3	2	1	1	16	16	12	3		37	13	4	118
Coelosphaerium ∝ or Gomphosphaeria		0.5	4	45	0.2	2	6	1	17	15	42	31	1		33	12	2	290
Dactylococcopsis ∝ or Rhabdoderma		0.5		0.5	1	2	0.3	93			35				1	0.2	0.3	16
Gloeocapsa																		
Gloeothece																		
Lyngbya			0.5	1		1		6			12	35	23		2		1	393
Marsoniella																		
Merismopedia		0.5		5		2	3	179		3	20	1	0.2		1	0.3	0.3	48
Microcystis				2			1	10		1	5				0.5	0.3	1	591
Oscillatoria			1					1		0.3	2	4	3		4	0.3		2430
Phormidium							0.2								0.3			
Pseudoanabaena																		
Radiocystis																		322
Raphidiopsis																		
Synechococcus																		
Synechocystis																		
Unid. Cyanophyceae	0.5	1						4							2			
DINOPHYCEAE																		
Ceratium													0.2		106			
Diplopsalis																		7
Glenodinium						95												
Gymnodinium	21	0.5		21	3		8	147	43	16	26	17			3	2	0.3	9
Peridiniopsis																		
Peridinium								8										
Unid. Dinophyceae	893	44		79	36	62	124	786	5	598	32	3			8	8	1	383

	[Clearwater]	Basshaunt	Bigwind	Blue Chalk	Buck	Chub	Crosson	Dickie	Glen	Gullfeather	Harp	Jerry	Little Clear	Red Chalk (east)	Red Chalk (main)	Solitaire	Walker	[Bay of Quinte (B)
	max. (mm^3/m^3)																	
RYPTOPHYCEAE																		
Chroomonas																		
Cryptaulax																		
Cryptomonas	82	123	21	61	47	131	117	112	15	179	132	166	128		104	56	12	1112
Katablepharis	0.5	1	2	3	1	8	2	3	3	5	12	5	3		16	0.3	2	43
Rhodomonas	0.5	19	9	4	4	2	1	2	44	1	16	9	3		7	0.3	1	83
Unid. Cryptophyceae			0.5	0.5		1		0.3										
UGLENOPHYCEAE																		
Euglena			3															25
Lepocinclis																		
Phacus																		
Trachelomonas					6	18		29		3								222
Unid. Euglenophyceae																		
HRYSOPHYCEAE																		
Bicoeca								0.3										
Bitrichia		1		0.5	1	1	0.2	0.5		2	1		2		1	0.3	0.3	
Chromulina (Monochrysis)	0.5		0.5	3	4	4		0.5	2	3	1	1	3			3		22
Chrysoamoeba																		
Chrysidiastrum						8					42	2			65	1		
Chrysochromulina breviturrita																		
Chrysochromulina parva																		
Chrysochromulina spp.	0.5			1	0.5	0.3		0.3	0.2	2	1		0.3		1			36
Chrysococcus																		
Chrysolycos		0.5		0.5						0.3	0.2	0.3			0.2		0.3	
Chrysosphaerella coronacircumspina																		
Chrysosphaerella longispina																		
Chrysosphaerella spp.				61	45	54	41	94		39	37	5	21		13	2	21	
Codonocladium																		
Codonosiga																		
Derepyxis																		

1976	[Clearwater]	Basshaunt	Bigwind	Blue Chalk	Buck	Chub	Crosson	Dickie	Glen	Gullfeather	Harp	Jerry	Little Clear	Red Chalk (east)	Red Chalk (main)	Solitaire	Walker	[Bay of Quinte (B)]
CHRYSOPHYCEAE (Cont'd)	max. (mm^3/m^3)																	
Desmarella																		
Dinobryon	72	0.5	21	47	174	308	17	416	6	30	122	6	3		19	3	101	153
Epipyxis							0.2	0.2										
Erkenia																		
Kephyrion	16		0.5	0.5	0.3	1	1	0.5	0.3	0.2	1	0.3	1		2	0.3	0.3	1
Mallomonas	0.5		41	41	35	181	17	53		54	224	118	68		63	1	18	45
Ochromonas																		
Pseudokephyrion								0.3			0.3							
Rhizochrysis										17	4							
Salpingoeca	0.5		0.5	3		11	1	2			3				6			17
Spiniferomonas			1			3	0.2	1			1	2						
Stelexomonas																		
Synura		15	5	19	3	152	9	584		82	5	16	14				16	6
Uroglena	0.5			0.5	1	0.2		3			1					0.2	17	
Unid. Chrysomonads	184	19	66	66	52	56	99	344	44	103	72	54	56		64	12	51	110
Unid. Chrysophyceae	0.5	0.5	1	2		4	0.3	0.2		4	1	1			1		0.3	12
Chrysophyceae cysts	7	5	14	13	23	24	21	3	2	113	27	1	11		3	17	10	2
CHLOROPHYCEAE																		
Actinastrum												1						62
Ankistrodesmus							2				3	4						3
Arthrodesmus				51	24	7					39	2			15		2	
Asterococcus																		
Binuclearia				2														
Botryococcus			12	15		82		80		31	399				73		45	
Carteria																		
Characium																		15
Chlamydomonas	11	5	14	17	10	12	8	11		10	9	10	11		12		1	185
Chlorella																		
Chodatella					0.2													27
Closteriopsis																		
Closterium	0.5		0.5				6		1		4	1						113

1976	[Clearwater]	Basshaunt	Bigwind	Blue Chalk	Buck	Chub	Crosson	Dickie	Glen	Gullfeather	Harp	Jerry	Little Clear	Red Chalk (east)	Red Chalk (main)	Solitaire	Walker	[Bay of Quinte (B)
CHLOROPHYCEAE (Cont'd)	max. (mm^3/m^3)																	
Coccomyxa																		
Coelastrum	2	1	1	6	2	3	4	1	119	52	16	1	3		9		4	268
Cosmarium	34		2	49		31	3	23			24		20		1		3	91
Crucigenia						2		8		24	3		0.2		1			6
Cylindrocystis	7																	
Dicellula																		
Dictyosphaerium	0.5	0.5	0.5	2	1	3	3	1	1	4	4	1			1	0.2	0.2	54
Dimorphococcus																		
Echinosphaerella																		
Elakatothrix			1	1	0.2	1	1	1	2	1			3		1	1	0.2	1
Euastrum								55									12	
Eudorina		3																
Franceia																		8
Geminella																		
Gloeocystis	0.5		3	23	4	24	4	16	48	45	36	3	7		61	26	4	163
Golenkinia																		75
Gonium										6								
Gyromitus																		
Kirchneriella				1		1	1	0.2		0.3			0.2					6
Koliella						1	1				0.3					0.2		
Lobomonas																		
Micrasterias																		
Monomastix																		
Monoraphidium			0.5	1	1	1	0.3	0.3	4	2	3	1	2		1	4	0.3	26
Mougeotia						1	16	6			0.3							448
Nephrochlamys																		
Nephrocytium			1												8			
Oedogonium																		
Oocystis	345	0.5	13	22	10	15	1	28	0.5	49	7	14	3		11	26	5	162
Pandorina																		52
Paramastix						1					1							
Paulschultzia				4							9							
Pediastrum						1					2	4					0.3	358

1976	[Clearwater]	Basshaunt	Bigwind	Blue Chalk	Buck	Chub	Crosson	Dickie	Glen	Gullfeather	Harp	Jerry	Little Clear	Red Chalk (east)	Red Chalk (main)	Solitaire	Walker	[Bay of Quinte (B)
CHLOROPHYCEAE (Cont'd)	max. (mm^3/m^3)																	
Pedinomonas								1					1					
Phacotus																		
Planctonema				1											2		3	
Planktosphaeria																		3
Polytoma																		
Pteromonas																		
Quadrigula			0.5	6		4	6	9	4	2	3	1			166		0.3	6
Radiococcus																		
Scenedesmus	0.5			1		1		5	0.3	6	6	0.2			1	0.2	1	152
Schizochlamys																		
Schroederia		0.5	0.5	1	1					1						1		7
Scourfieldia																		
Selenastrum																		
Sorastrum																		
Sphaerocystis				11		0.5	0.5	1		20	4	2	0.5		9	23		11
Sphaerozosma				4		7												
Spermatozopsis																		
Spondylosium	5										3							
Staurastrum	16			13	42	27					10							78
Staurodesmus				35														
Stichococcus																		
Tetraëdron	5					2			41	2	5		0.2					30
Tetrastrum										1	0.3						0.2	4
Treubaria																		7
Trochiscia																		
Ulothrix																		
Westella																		
Xanthidium	4																	
Unid. Chlorophyceae	4	9	2	13	5	6	3	10	41	21	43	6	32		16	9		57

	[Clearwater]	Basshaunt	Bigwind	Blue Chalk	Buck	Chub	Crosson	Dickie	Glen	Gullfeather	Harp	Jerry	Little Clear	Red Chalk (east)	Red Chalk (main)	Solitaire	Walker	[Bay of Quinte (B)
CILLARIOPHYCEAE	max. (mm^3/m^3)																	
Achnanthes	32		0.5										0.3		1			
Amphora															1			
Asterionella	0.5		4	50	76	24		97		319	48				134	12	35	609
Attheya																		
Cocconeis	1			1														
Coscinodiscus																		
Cyclotella	7	2		217	155	28	2	23	137	20	107	72	171		1939	26	108	254
Cymbella																		
Diatoma							9											625
Eunotia	2						2			7		2			1			
Fragilaria			0.5	1		1					45	4			37	1		450
Frustulia																		
Gomphonema																2		4
Melosira			29			7	1	223		306	9							31424
Meridion																		
Navicula					2			0.2					1		0.3		0.3	1
Nitzshia	1			1		7		0.2			3		6		2	0.2		53
Pinnularia																		
Rhoicosphaenia			1															
Rhizosolenia			77			184	16	111		90	750	10	1		0.3		11	352
Skeletonema																		
Stenopterobia																		
Stephanodiscus	1		1		3	4		21		5	56		23		0.3			6027
Surirella																		
Synedra																		
Tabellaria	0.5		1	2	0.2	164	1	0.3	3		29	9	6		5	1	1	73
Unid. Diatoms		8	103	253		865	266	78			198		149		81		81	390
				4		4				3					0.3			
NTHOPHYCEAE																		
Isthmochloron	6																	
Ophiocytium																		
Pseudopolyedriopsis																		

1977	[Clearwater]	Basshaunt	Bigwind	Blue Chalk	Buck	Chub	Crosson	Dickie	Glen	Gullfeather	Harp	Jerry	Little Clear	Red Chalk (east)	Red Chalk (main)	Solitaire	Walker	[Bay of Quinte (B)
	max. (mm^3/m^3)																	
CYANOPHYCEAE																		
Anabaena			2	27	2	70					41	48	20	12	25	6	11	8284
Aphanizomenon											3		4	5				1127
Aphanocapsa		5	1	2	0.3	1	1	0.2		2	155	4		28	3	0.3	0.2	14
Aphanothece	1	4	18	7	9	3	1	1	0.2	4	55	95	31	33	76	1	3	33
Chroococcus		2	9	13	2	4	16	1	0.2	3	14	17	16	12	24	13	1	42
Coelosphaerium ∝ or Gomphosphaeria	1	0.2	5	19	2	12	28	30		0.3	25	39	8	10	16	4	0.3	154
Dactylococcopsis ∝ or Rhabdoderma			1	3		127	58	70			20	9	0.5	2	2	0.5		
Gloeocapsa							1					3						
Gloeothece											21							
Lyngbya		0.3		2	1	0.2			0.3		8	17	5	3	6		2	94
Marsoniella																		
Merismopedia		5	2	7	3	10	30	87		1	4	8	8	12	4		0.2	23
Microcystis			6	1		1	0.2	1	0.3	2	35	1	11	12	5		0.3	119
Oscillatoria	18			0.3	1	0.2		1	1	1	3	2	4	10	2	0.3	0.3	647
Phormidium										0.2			5	3				
Pseudoanabaena																		
Radiocystis																		16
Raphidiopsis																		
Synechococcus						0.2		0.3					1	0.3	0.2			1
Synechocystis				0.2														
Unid. Cyanophyceae	2	0.3		1			1		0.2	1			40	3	1		0.2	
DINOPHYCEAE																		
Amphidinium																		0.2
Ceratium														2	12			1105
Diplopsalis				0.2														861
Glenodinium													71					
Gymnodinium	106		1	5	3	46	7	9			46	97		30	10	19	11	180
Peridiniopsis																		192
Peridinium	164			14		0.3				15				1	40			207
Unid. Dinophyceae	221		3	164	172	128	18	174		167	83	24	56	135	48	84	23	438

1977	[Clearwater]	Basshaunt	Bigwind	Blue Chalk	Buck	Chub	Crosson	Dickie	Glen	Gullfeather	Harp	Jerry	Little Clear	Red Chalk (east)	Red Chalk (main)	Solitaire	Walker	[Bay of Quinte (B)]
	max. (mm^3/m^3)																	
RYPTOPHYCEAE																		
Chroomonas				0.2										0.2				5
Cryptaulax				0.3									0.3					3
Cryptomonas	187	57	22	122	66	234	26	82	260	244	207	405	118	53	62	67	41	1244
Katablepharis	1	1	2	6	5	11	4	14	1	10	9	18	6	11	10	6	6	20
Rhodomonas	0.3	12	8	40	16	7	2	7	14	5	18	32	68	15	7	38	11	70
Unid. Cryptophyceae					0.5	0.3									0.2	0.2	0.3	
UGLENOPHYCEAE																		
Euglena													1	1	2			225
Lepocinclis																		
Phacus														6				0.3
Trachelomonas					10	32				42			4	10	6	1		1
Unid. Euglenophyceae												6						55
HRYSOPHYCEAE																		
Bicoeca				1		0.2		3		1							0.2	
Bitrichia			1	2	0.2	1				3	2	2	1	1	1			
Chromulina (Monochrysis)		2	2	7	1	4	1	2	2	1	11	15	6	8	4	3	2	87
Chrysoamoeba																		
Chrysidiastrum												2		1	1			
Chrysochromulina breviturrita																		
Chrysochromulina parva																		
Chrysochromulina spp.		0.2	2	6	4	2	0.3	1	2	9	6	6	1	4	6	2	1	
Chrysococcus								2				1						
Chrysolycos																		
Chrysosphaerella coronacircumspina				3	0.3					1	1		0.3	0.5	0.5			1
Chrysosphaerella longispina																		
Chrysosphaerella spp.			1	5	2	72	1	73		1	36			192	5		12	
Codonocladium						0.3												
Codonosiga																		2
Derepyxis																		

1977	[Clearwater]	Basshaunt	Bigwind	Blue Chalk	Buck	Chub	Crosson	Dickie	Glen	Gullfeather	Harp	Jerry	Little Clear	Red Chalk (east)	Red Chalk (main)	Solitaire	Walker	[Bay of Quinte (B)]
	max. (mm^3/m^3)																	
CHRYSOPHYCEAE (Cont'd)																		
Desmarella																		8
Dinobryon	35	6	173	70	61	101	5	483		21	38	130	26	69	22	8	101	
Epipyxis			0.3	0.5	0.3	2	0.5	1				2	1	1	1	0.2		0.3
Erkenia																		6
Kephyrion	189	0.2	0.2	1	0.3	2	1	1	0.2	3	3	1	1	2	1	1	0.3	
Mallomonas		4	22	44	28	59	16	104	2	67	93	78	23	37	20	11	30	27
Ochromonas						1		1				0.2		0.2	2			16
Pseudokephyrion																		
Rhizochrysis																	1	
Salpingoeca		0.3	1	4	1	2	0.3	6		5	2	1	1	4	2	0.2	1	6
Spiniferomonas					0.3	0.2		0.3			1	2		1				
Stelexomonas																		
Synura	1	28	18	138	24	509	3	1200		34	140	68	12	64	21	5	241	
Uroglena	0.3		3	44	1	29	29	18		16	1			24	9	0.3	10	
Unid. Chrysomonads	232	15	43	90	51	65	51	94	14	224	57	109	127	250	68	120	115	34
Unid. Chrysophyceae	7		1	2	0.3	3	2		0.2	3	3	1	0.3	3	0.5	1	1	4
Chrysophyceae cysts	21	14	40	23	6	39	33	10	8	313	66	69	4	33	9	77	16	
CHLOROPHYCEAE																		
Actinastrum																		11
Ankistrodesmus					0.5		0.3			3	6	12				1		5
Arthrodesmus			39	12		16	4			23	31	11			1	0.3		
Asterococcus																		
Binuclearia																		
Botryococcus		3	12	63		68	43	164	0.2	29	55	5	10		31	7		130
Carteria										5								205
Characium															0.2			56
Chlamydomonas	40	0.3	3	9	8	12	8	6	1	26	13	40	6		5	6	7	237
Chlorella																		1
Chodatella																		3
Closteriopsis											1							
Closterium	7		1				2				8	9						44

1977	[Clearwater]	Basshaunt	Bigwind	Blue Chalk	Buck	Chub	Crosson	Dickie	Glen	Gullfeather	Harp	Jerry	Little Clear	Red Chalk (east)	Red Chalk (main)	Solitaire	Walker	[Bay of Quinte (B)
CHLOROPHYCEAE (Cont'd)	max. (mm^3/m^3)																	
Coccomyxa						0.2						1						
Coelastrum	8	0.3	0.3	7	48	2	3	9		26	7	10	6		3	6	8	344
Cosmarium	5		28	4		16		2		18	31	5	0.3	1	11	10	3	115
Crucigenia			1	10	13	5	0.3	21		7	26	4	13	7	68	55		
Cylindrocystis																		
Dicellula																		
Dictyosphaerium		1	0.2	5	0.2	1	1	2		3	2	3		0.2	0.2		0.3	22
Dimorphococcus								6										0.2
Echinosphaerella																		
Elakatothrix			0.5	1		1					0.3	1	2	2	1	0.3		0.3
Euastrum											10						6	
Eudorina			8															45
Franceia																		75
Geminella														3				
Gloeocystis	1		17	11	4	8	7	26	2	343	17	18	51	54	137	47	15	192
Golenkinia						1				1								48
Gonium											2							15
Gyromitus				4		14			1	6	8	0.3		3		2		51
Kirchneriella	22	0.2		1		0.5		2		0.3	4		0.3	2	0.2			5
Koliella				0.5		9	4				1	1	1					5
Lobomonas																		
Micrasterias																		
Monomastix						1		0.3			0.3		0.3	0.2				
Monoraphidium		0.2		1	0.2	1	1	1		6	2		0.3	2	1	0.3	1	9
Mougeotia			1	1						41	1	2						5
Nephrochlamys				0.3		0.3					2			2	0.3			8
Nephrocytium			1	1	3	1									5	2		208
Oedogonium																		317
Oocystis	510	5	12	15	11	6	12	35		40	42	75	11	36	13		2	2222
Pandorina																		83
Paramastix						0.3						11			1			
Paulschultzia																		
Pediastrum			0.2								6	1	1	1				183

1977	[Clearwater]	Basshaunt	Bigwind	Blue Chalk	Buck	Chub	Crosson	Dickie	Glen	Gullfeather	Harp	Jerry	Little Clear	Red Chalk (east)	Red Chalk (main)	Solitaire	Walker	[Bay of Quinte (B)]
CHLOROPHYCEAE (Cont'd)	max. (mm^3/m^3)																	
Pedinomonas				0.2								1		0.2	0.3			15
Phacotus											1							
Planctonema				3						2		2		7	0.3		0.3	4
Planktosphaeria																		
Polytoma						0.3				0.3			0.2					3
Pteromonas																		
Quadrigula		0.2	3	5	0.3	6	3	5		0.3	9	5	2	8	5		1	2
Radiococcus																		
Scenedesmus	0.3		1	1	36	3	1	13	0.2	6	3	3	3	6	3	0.3	1	172
Schizochlamys																		
Schroederia		0.3		1	0.2	0.3			1	0.2	0.2		0.3	0.3	0.2	0.2		15
Scourfieldia												0.2						
Selenastrum															1			
Sorastrum																		
Sphaerocystis		0.3	1					2		2	2			2	5			
Sphaerozosma																		
Spermatozopsis					0.3	0.3												
Spondylosium						3					3	2						
Staurastrum	14		2	65		100		18		0.2			1	7				222
Staurodesmus											2	0.2	1	1	11			
Stichococcus																		
Tetraëdron			1	0.3		2	2	5			1	1	1	8	1			9
Tetrastrum			0.2	0.2	0.2			0.2		0.3	1	0.2		1				28
Treubaria						0.3	0.5					0.3						22
Trochiscia																		
Ulothrix				1							3			4				39
Westella																		
Xanthidium											2							
Unid. Chlorophyceae	1	1	7	4	3	1	1	4	0.3	26	3	11	5	31	7	12	2	18

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	[Clearwater]	Basshaunt	Bigwind	Blue Chalk	Buck	Chub	Crosson	Dickie	Glen	Gullfeather	Harp	Jerry	Little Clear	Red Chalk (east)	Red Chalk (main)	Solitaire	Walker	[Bay of Quinte (B)
ACILLARIOPHYCEAE	max. (mm^3/m^3)																	
Achnanthes			0.3								0.3		0.3	0.2	2			1
Amphora		8		56	4	30		82		148	32	17	12	46	52	31	35	714
Asterionella																		
Attheya																		
Cocconeis																		30
Coscinodiscus	3	0.3	30	160	30	16	3	3	81	47	422	570	477	1160	1534	201	41	140
Cyclotella				5								3						33
Cymbella							2				1			2	0.3			1324
Diatoma			1	0.3		6		1			3	9		0.2	1			324
Eunotia																		
Fragilaria			65			68		158		299				37				26024
Frustulia															3			
Gomphonema	3		0.2	6						3	1	1		1	0.5			1
Melosira				1		0.3				1		1		1	3			43
Meridion															19			
Navicula							25											
Nitzshia			17	1		97		7		116	841	1117	6	21	2		11	59
Pinnularia														3				26
Rhoicosphaenia																		
Rhizosolenia	2		17			5	0.3	7		14	15	256	1			13		5132
Skeletonema																		109
Stenopterobia	0.3			4	1	8		3	2	17	41	134	5	6	7	0.3	1	1350
Stephanodiscus		5	892	181	3	214	81	147		16	107	27		139	108	13	18	980
Surirella																		
Synedra																		
Tabellaria																		
Unid. Diatoms																		
ANTHOPHYCEAE																		
Isthmochloron	17											1						
Ophiocytium																		
Pseudopolyedriopsis																	1	

1978	[Clearwater]	Basshaunt	Bigwind	Blue Chalk	Buck	Chub	Crosson	Dickie	Glen	Gullfeather	Harp	Jerry	Little Clear	Red Chalk (east)	Red Chalk (main)	Solitaire	Walker	[Bay of Quinte (B)]
	max (mm^3/m^3)																	
CYANOPHYCEAE																		
Anabaena		1	3	23	0.2	4			9	0.2	180	6		25	44	0.2	1	2287
Aphanizomenon		3										1						185
Aphanocapsa	0.2		6	36	0.2	0.2	1	0.3	1	0.2	37	7	0.3	16	79	40	0.2	38
Aphanothece	0.3	23	4	15	4	3	3	1	23	4	53		23	8	67	21	4	49
Chroococcus		17	2	29	3	14	2	2	25	44	19	31	9	69	72	15	2	14
Coelosphaerium ∝ or Gomphosphaeria		11	5	24	1	3	5	3	4	2	55	215	14	23	57	32	9	121
Dactylococcopsis ∝ or Rhabdoderma			0.5	1		2	1	1			41	2	1	4	2	1	0.2	
Gloeocapsa		0.3								0.3		1						
Gloeothece										0.2								
Lyngbya				8				1		0.3	52	3	0.2	5	3		1	98
Marsoniella																		
Merismopedia		16	0.2	11		2	9	19	8	1	9	69	88	4	22	20	16	3
Microcystis				1			0.5	0.2	6		0.2	4		2	5	8	12	5
Oscillatoria	0.2		2	1	0.3				1	54	0.2	1		2	0.3	0.2	1	359
Phormidium				2		0.2			1					1	7			257
Pseudoanabaena																		
Radiocystis																		
Raphidiopsis																		
Synechococcus																1		
Synechocystis																		
Unid. Cyanophyceae	0.5	0.2							1						21		0.2	0.5
DINOPHYCEAE																		
Ceratium				0.2											42			252
Diplopsalis																		80
Glenodinium																		
Gymnodinium																		54
Peridiniopsis																		
Peridinium	211												11					236
Unid. Dinophyceae	284	30	12	41	176	155	24	304	259	213	175	37	28	53	42	20	51	369

1978	[Clearwater]	Basshaunt	Bigwind	Blue Chalk	Buck	Chub	Crosson	Dickie	Glen	Gullfeather	Harp	Jerry	Little Clear	Red Chalk (east)	Red Chalk (main)	Solitaire	Walker	[Bay of Quinte (B)
	max. (mm^3/m^3)																	
CRYPTOPHYCEAE																		
Chroomonas																		
Cryptaulax																		
Cryptomonas	75	54	94	49	78	194	48	841	141	193	95	149	66	60	63	74	162	341
Katablepharis		4	5	4	4	11	8	23	4	10	14	12	3	7	5	6	4	16
Rhodomonas	0.3	9	3	14	8	3	0.3	4	33	5	15	21	24	9	11	39	9	59
Unid. Cryptophyceae																		
EUGLENOPHYCEAE																		
Euglena												1						48
Lepocinclis																		
Phacus								0.2						0.2				
Trachelomonas								16		0.2								13
Unid. Euglenophyceae																		
CHRYSOPHYCEAE																		
Bicoeca																		
Bitrichia		1		1	1	0.5	1	1	1	0.5	1	1	1	2	1	0.3	1	1
Chromulina (Monochrysis)		2	2	5	2	5	0.3	4	7	8	6	9	2	3	1	1	1	18
Chrysoamoeba																		
Chrysidiastrum																		
Chrysochromulina breviturrita																		
Chrysochromulina parva																		
Chrysochromulina spp.	0.5	1	4	8	7	13	1	1447	18	1	7	21	1	6	8	2	5	26
Chrysococcus												0.5						
Chrysolycos								0.3			1		0.3		0.5	2	1	
Chrysosphaerella coronacircumspina																		
Chrysosphaerella longispina																		
Chrysosphaerella spp.		0.2	14		19	382	8	121		115	95	8	4	543	7	1	135	
Codonocladium																		
Codonosiga																		
Derepyxis							2											

1978	[Clearwater]	Basshaunt	Bigwind	Blue Chalk	Buck	Chub	Crosson	Dickie	Glen	Gullfeather	Harp	Jerry	Little Clear	Red Chalk (east)	Red Chalk (main)	Solitaire	Walker	[Bay of Quinte (B)]
CHRYSOPHYCEAE (Cont'd)	max. (mm^3/m^3)																	
Desmarella																		
Dinobryon	47	5	55	25	12	421	26	661	2	52	15	139	37	230	111	4	41	111
Epipyxis		0.2	0.3	2		4		1			1			1			0.2	
Erkenia																		
Kephyrion		1	1	2	1	1	1	28	0.3	2	4	3	1	2	2	0.5	1	2
Mallomonas		5	47	17	32	421	47	39	82	30	62	77	12	63	33	6	27	70
Ochromonas		0.3	1	1	1	1	0.2	2	1	0.3	1	1	0.2	0.5	1	0.3	1	
Pseudokephyrion																		
Rhizochrysis																		
Salpingoeca		0.5	1	1	0.5	5	2	9	0.2	2	5	11	0.2	1	1	1	1	1
Spiniferomonas				0.3	0.3	3		2	0.2		1	1	0.2	1	1	0.5	0.2	
Stelexomonas						0.3		0.2	0.2		0.3				0.2			0.2
Synura	17	15	164	15	19	123	28	109		130	27	12	5	107	14	2	229	1
Uroglena	0.2	4	17	30	2	693	11	2		2	4	96	3	92	6	7	16	3
Unid. Chrysomonads	48	47	57	300	107	548	257	117	93	148	87	61	41	102	42	44	91	64
Unid. Chrysophyceae	0.2	0.2		1		5	0.3	5	1	2	4	3		1	1	0.2	4	15
Chrysophyceae cysts	17	9	15	27	22	17	0.2	29	26	138	53	33	49	23	8	28	36	49
CHLOROPHYCEAE																		
Actinastrum														2				5
Ankistrodesmus		0.2	0.2	1				1			3	3		0.2				
Arthrodesmus			0.3	15	0.3	14	3	68		0.3	60	20	10	2	4	10	10	
Asterococcus											3							
Binuclearia																		
Botryococcus		43	7	0.2	114	59	1	96	14	146	49		9	43	12	27	5	
Carteria	0.2					4			1				0.3			1		53
Characium							0.3										0.2	
Chlamydomonas	41	9	2	10	2	37	14	11	4	22	40	8	6	9	7	3	5	90
Chlorella																		
Chodatella												1			0.3			4
Closteriopsis																		
Closterium											13	9			0.3			33

1978	[Clearwater]	Basshaunt	Bigwind	Blue Chalk	Buck	Chub	Crosson	Dickie	Glen	Gullfeather	Harp	Jerry	Little Clear	Red Chalk (east)	Red Chalk (main)	Solitaire	Walker	[Bay of Quinte (B)
CHLOROPHYCEAE (Cont'd)	max. (mm^3/m^3)																	
Coccomyxa																		
Coelastrum	2	5	6	60	0.2	2		21		10	13	11	1	7	8	1		130
Cosmarium		0.2	28	43	4	22		0.2		51	33	22	31	1	18	0.3	13	0.2
Crucigenia		23	0.3	53	15	13		4	160	13		4	8	29	47	35	0.2	8
Cylindrocystis	0.2																	
Dicellula																		8
Dictyosphaerium	3	0.3		3		15	3	11	0.2	1	0.3	4	1	5			1	221
Dimorphococcus								12		0.2								0.2
Echinosphaerella																		8
Elakatothrix			0.3	0.5	0.2	1	1			0.2	0.2	0.3	0.2	3	1		0.3	0.2
Euastrum						0.2		9			0.2	4	0.2			2	0.2	
Eudorina																		
Franceia																		1
Geminella																		
Gloeocystis	4	6	92	64	5	71	22	19	147	50	38	32	51	158	316	43	16	17
Golenkinia									0.2	1								55
Gonium											1							
Gyromitus		1	5			26		0.2	0.2	7	7	4	1	2	1		3	7
Kirchneriella	51			0.2		2		2	0.2	0.5			2					3
Koliella		0.2				0.5					0.3	0.5	0.2					2
Lobomonas																		
Micrasterias											5							
Monomastix																		
Monoraphidium		0.3		1		0.2		0.5	0.5	13	2	3	0.3			0.5		23
Mougeotia	6	41			0.2			9								0.3		
Nephrochlamys																		
Nephrocytium				0.3		5				2	2			2				6
Oedogonium												1		2				
Oocystis	176	3	18	14	8	14	3	14	13	35	26	14	2	18	10	9	2	102
Pandorina						2							5					0.5
Paramastix		0.3		1				2			7			2				7
Paulschultzia																		
Pediastrum						0.2				0.5	4		0.2	0.2				59

1978	[Clearwater]	Basshaunt	Bigwind	Blue Chalk	Buck	Chub	Crosson	Dickie	Glen	Gullfeather	Harp	Jerry	Little Clear	Red Chalk (east)	Red Chalk (main)	Solitaire	Walker	[Bay of Quinte (B)]
CHLOROPHYCEAE (Cont'd)	max. (mm^3/m^3)																	
Pedinomonas																		
Phacotus																		
Planctonema										5								27
Planktosphaeria																		
Polytoma																		
Pteromonas			6															
Quadrigula	0.3	0.5		3	0.5	3	2	14	5	0.5	7	4	2	8	3			14
Radiococcus																		
Scenedesmus	1	0.2	8	1	2	3	0.5	10	0.3	25	12	6	4	2	1		1	213
Schizochlamys																		
Schroederia		0.3		0.5	0.2	0.2			2				1	0.2		0.3		5
Scourfieldia								4	6									
Selenastrum																		
Sorastrum												1						
Sphaerocystis											6							
Sphaerozosma				0.5		0.3		0.2			1	0.5			0.2	0.2		1
Spermatozopsis			6	0.2						27	0.2			0.2				
Spondylosium	9			7	0.2	64	137				0.2		6	0.2	33			
Staurastrum								0.3		6	0.2	0.2					1	
Staurodesmus																		
Stichococcus		0.2		1		7		2	3	3	4	1	0.2	3	1			22
Tetraëdron								2		0.2	1	0.3	0.5	1				2
Tetrastrum		0.2	0.2		0.2			0.2						0.2			0.2	3
Treubaria																		
Trochiscia				1							0.5	3						
Ulothrix																		
Westella				2		1									1			
Xanthidium	15		0.3	3	0.3	0.5	0.2	3	14	2	1	1		6	1	3	2	67
Unid. Chlorophyceae																		

1978	[Clearwater]	Basshaunt	Bigwind	Blue Chalk	Buck	Chub	Crosson	Dickie	Glen	Gullfeather	Harp	Jerry	Little Clear	Red Chalk (east)	Red Chalk (main)	Solitaire	Walker	[Bay of Quinte (B)
BACILLARIOPHYCEAE	max. (mm^3/m^3)																	
Achnanthes	5			1		3					1			1		0.2		3
Amphora																		
Asterionella		2	38	2	0.3	592	736	90		31	103	4239	2	13	40	36	29	391
Attheya																		81
Cocconeis																		
Coscinodiscus																		
Cyclotella	0.3	326	59	389	327	34	3	76	980	116	103	162	88	102	689	130	227	56
Cymbella														1				97
Diatoma																		
Eunotia	5			1					0.2								0.3	
Fragilaria			23								5			1				436
Frustulia	0.2																	
Gomphonema												6	2					5
Melosira			37			0.2		273		98	20							8926
Meridion											0.2							
Navicula	0.2	0.3				1								0.5		1	0.2	1
Nitzshia		0.2						1		0.2			0.5	1				23
Pinnularia												1			0.2			
Rhoicosphaenia																		
Rhizosolenia		1	1			110	60	494		48	141	784	0.3	2			11	66
Skeletonema																		
Stenopterobia																		
Stephanodiscus						2		16		9	5						25	2464
Surirella																		
Synedra	0.2		10	12	0.3	7		5	0.2	3	27	74	1	2	12	2	0.5	68
Tabellaria		79	78	152	4	325	228	68		15	342	8	22	64	53	24	139	89
Unid. Diatoms														0.2				
XANTHOPHYCEAE																		
Isthmochloron											4							
Ophiocytium										3								0.3
Pseudopolyedriopsis																		

1979	[Clearwater]	Basshaunt	Bigwind	Blue Chalk	Buck	Chub	Crosson	Dickie	Glen	Gullfeather	Harp	Jerry	Little Clear	Red Chalk (east)	Red Chalk (main)	Solitaire	Walker	[Bay of Quinte (B)
	max. (mm^3/m^3)																	
CYANOPHYCEAE																		
Anabaena		6	8	8	0.3	17	12		0.3	1	27	44	5	32	0.3	3	6	1083
Aphanizomenon					2	2						0.3		0.2				314
Aphanocapsa				1	0.3	2	3	0.2	1	0.3	3	0.2		2	2	0.3		29
Aphanothece		48	7	23	3	11	8	6	25	2	14	9	17	58	116	40	12	413
Chroococcus		14	3	16	3	65	39	1	42	5	13	12	13	26	99	20	4	28
Coelosphaerium ∝ or Gomphosphaeria		1	6	5	5	23		0.3	30	4	7	80	3	9	2	0.2	4	330
Dactylococcopsis ∝ or Rhabdoderma			1	1		153	24	0.5			22	0.2	5	2	1	1	0.5	1
Gloeocapsa						4		0.3	1					0.2				
Gloeothece											0.3							
Lyngbya		1	1	6	0.2	9	0.2	9			18	2	2	5	2		1	111
Marsoniella																		
Merismopedia		5	1	4	5	21	18	3	2	15	13	29	1	6	11	3	1	5
Microcystis		0.2			0.2	1					6		4	3	1	3		398
Oscillatoria			0.2	1	0.2	1	2	4	58	1	4	1	2	1	0.2	0.5	26	239
Phormidium											1			1	1		8	
Pseudoanabaena											1							
Radiocystis		1		0.3							6			0.5	0.2	2		
Raphidiopsis																		
Synechococcus				0.3		1								2				
Synechocystis															0.3			
Unid. Cyanophyceae			4	1		14	4	0.5	4	2	18	1	2	1	0.3	0.2	3	
DINOPHYCEAE																		
Ceratium		2	3	2							1			5	27		9	449
Diplopsalis																		789
Glenodinium																		
Gymnodinium																		5
Peridiniopsis																		
Peridinium		5	17	14	30	144	47	1339		27	22	6	7	16	31	13	22	162
Unid. Dinophyceae		346	23	42	580	56	10	241	97	424	59	30	39	38	27	18	82	152

1979	[Clearwater]	Basshaunt	Bigwind	Blue Chalk	Buck	Chub	Crosson	Dickie	Glen	Gullfeather	Harp	Jerry	Little Clear	Red Chalk (east)	Red Chalk (main)	Solitaire	Walker	[Bay of Quinte (B)
	max. (mm^3/m^3)																	
CRYPTOPHYCEAE																		
Chroomonas																		
Cryptaulax					2									0.2	0.5	0.2	0.2	
Cryptomonas		49	33	84	64	60	27	1022	219	69	84	189	53	60	53	31	42	647
Katablepharis		11	4	5	8	7	4	19	10	13	12	25	2	7	7	4	5	33
Rhodomonas		8	5	8	10	3	1	1	48	2	13	24	20	11	6	9	5	61
Unid. Cryptophyceae		0.2	2	1						0.2	1			0.5	1		0.2	2
EUGLENOPHYCEAE																		
Euglena		5		1		1		7		3	8		2					
Lepocinclis							0.3			1								
Phacus								0.2										
Trachelomonas		3			0.3	6	1	30		9							0.2	
Unid. Euglenophyceae								1					0.2	0.5				
CHRYSOPHYCEAE																		
Bicoeca		1		1	0.3	1	0.3	1		1	0.5	1	0.2	1	1		0.3	
Bitrichia		1	0.5	1	0.3	1	0.3	1	0.3	1	1	1	1	1	1	1	0.5	0.3
Chromulina (Monochrysis)		1	1	3	1	5	1	8	1	3	4	2	1	2	5	0.5	3	13
Chrysoamoeba										2		1			1			
Chrysidiastrum		3																
Chrysochromulina breviturrita																		
Chrysochromulina parva																		
Chrysochromulina spp.		4	2	6	18	4	4	2438	19	7	14	13	3	34	7	5	5	28
Chrysococcus		1				0.2						1						
Chrysolycos		1		0.2	2		0.2	1		0.3	2	1	0.5	0.5	1	0.5	1	1
Chrysosphaerella coronacircumspina																		
Chrysosphaerella longispina																		
Chrysosphaerella spp.		37	23	15	97	252	7	10		278	99	285	51	1042	23	9	381	
Codonocladium																		
Codonosiga					1													
Derepyxis																		

1979	[Clearwater]	Basshaunt	Bigwind	Blue Chalk	Buck	Chub	Crosson	Dickie	Glen	Gullfeather	Harp	Jerry	Little Clear	Red Chalk (east)	Red Chalk (main)	Solitaire	Walker	[Bay of Quinte (B)]
	max. (mm^3/m^3)																	
CHRYSOPHYCEAE (Cont'd)																		
Desmarella										0.3								
Dinobryon		29	56	90	122	65	21	264	48	62	347	20	4	89	50	12	106	19
Epipyxis				5		1		4	0.5		3	5		3	2		0.2	
Erkenia			0.3															
Kephyrion		2	1	5	4	2	2	10	5	3	9	7	1	7	7	1	1	1
Mallomonas		24	30	28	17	25	37	134	67	26	87	48	9	35	19	17	28	16
Ochromonas			0.5	0.3	1	24	1	0.3	0.3	2	2	4		1	1	0.2	0.5	
Pseudokephyrion								0.3		0.2				0.3				
Rhizochrysis			2	2				11			3	4		1	3			
Salpingoeca		3	1	7	2	3	3	17	0.5	3	3	4	4	6	2	1	4	1
Spiniferomonas		1		0.2	2	3	0.3	2		3	3	2	0.5	2	1		1	
Stelexomonas				0.3	0.2	0.3		1			1	1	0.2	1	0.3			
Synura		24	39	37	64	185	6	145		53	24	284	6	46	9		229	
Uroglena		9	56	49	28	47	1	12	1	2	11	474	2	55	5	12	69	
Unid. Chrysomonads		45	16	79	41	71	26	210	26	47	96	248	69	104	50	28	34	60
Unid. Chrysophyceae		0.2	0.5	1	1	7	0.2	2	0.3	9	6	1	1	3	1		1	7
Chrysophyceae cysts		38	18	30	42	78	15	62	124	134	39	55	31	23	20	10	38	13
CHLOROPHYCEAE																		
Actinastrum						0.2		1										
Ankistrodesmus			0.3	0.2		0.3	1	1		1	5	3						
Arthrodesmus		0.2	8	6	0.2	18	1	118		4	54	28	12	3	3	14	10	
Asterococcus																		
Binuclearia																		
Botryococcus		14	18	35	16	97	3	142	18	107	78	5	15	61	73	26	12	
Carteria						3			0.2	0.3					0.2			14
Characium				0.3														
Chlamydomonas		8	1	13	9	16	5	18	17	20	11	16	1	6	7	3	9	134
Chlorella										0.3					1			
Chodatella								0.2							1			5
Closteriopsis																		
Closterium		1	0.3	0.3	4			56			15	2					0.2	4

1979	[Clearwater]	Basshaunt	Bigwind	Blue Chalk	Buck	Chub	Crosson	Dickie	Glen	Gullfeather	Harp	Jerry	Little Clear	Red Chalk (east)	Red Chalk (main)	Solitaire	Walker	[Bay of Quinte (B)
CHLOROPHYCEAE (Cont'd)	max. (mm^3/m^3)																	
Coccomyxa																		
Coelastrum		4	1	1	4	3	0.2	1	12	2	1	3	4	0.3	1	1	4	69
Cosmarium		8	0.3	13	3	27		3	1	7	50	3	5	7	0.5	28	2	
Crucigenia		8	0.5	14	5	31	1	1	37	13	18	7	16	24	35	41		
Cylindrocystis																		
Dicellula																		
Dictyosphaerium				5	0.5			0.5		2	2	0.3	0.2	7	0.3	1		43
Dimorphococcus								0.2										28
Echinosphaerella																		
Elakatothrix				0.5	0.2	0.2	0.3	0.2				0.2	1	1	0.5	0.3	0.5	
Euastrum				0.2		29					11	8		1	0.2	4	0.2	
Eudorina												2						17
Franceia																		4
Geminella										3				8	0.2			
Gloeocystis		3	13	32	15	123	118	11	77	30	17	9	203	56	156	95	8	31
Golenkinia					0.3	0.2											0.3	81
Gonium																		
Gyromitus		1	0.2	2	4	12	0.3	3	2	9	1	0.2	1	1	0.3	0.2	7	4
Kirchneriella						0.5	0.2	1		3	1		0.5	0.3				4
Koliella		1		1				3	2		1	1				0.5		
Lobomonas				1														
Micrasterias																		
Monomastix																		
Monoraphidium		0.2		1	1	1	0.2	16	2	7	2	1	0.2	0.5		0.2		12
Mougeotia						0.3												23
Nephrochlamys																		
Nephrocytium				12	2	1				2	1			1	7	0.3	1	2
Oedogonium																		
Oocystis		9	2	16	5	11	3	10	24	11	12	21	9	11	18	21	1	105
Pandorina						0.3							0.2					
Paramastix				0.2		0.3	1	1	2		1	27			2		1	
Paulschultzia				1														4
Pediastrum			1	0.3	0.2	19		2			7							181

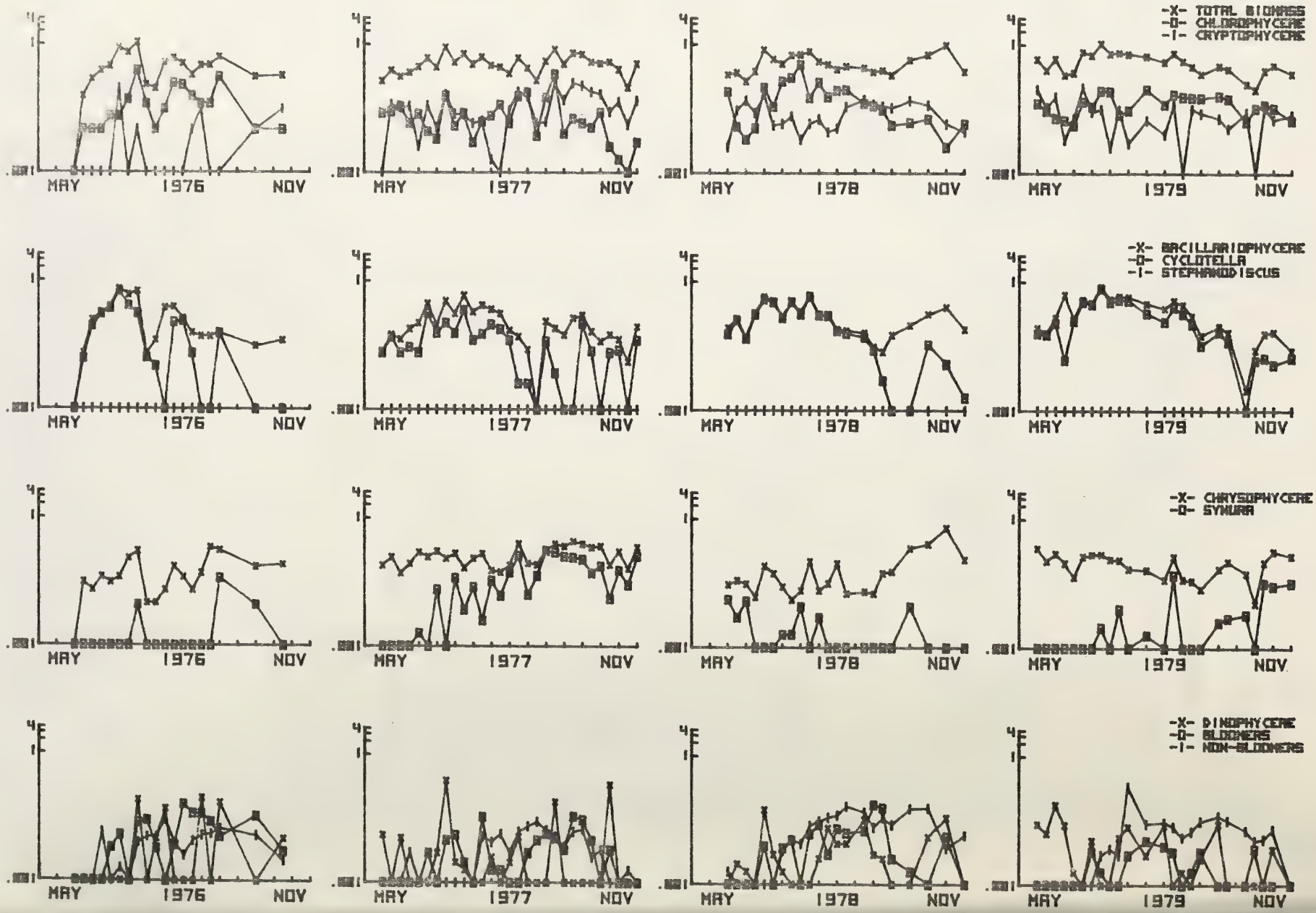
1979	[Clearwater]	Basshaunt	Bigwind	Blue Chalk	Buck	Chub	Crosson	Dickie	Glen	Gullfeather	Harp	Jerry	Little Clear	Red Chalk (east)	Red Chalk (main)	Solitaire	Walker	[Bay of Quinte (B)]
CHLOROPHYCEAE (Cont'd)	max. (mm^3/m^3)																	
Pedinomonas				1	0.3	0.5	1	1			0.5	4		0.3	0.5		0.3	
Phacotus																		
Planctonema				4	0.2					4				1	0.3			
Planktosphaeria											4	5						
Polytoma																		
Pteromonas																		
Quadrigula		2	1	5	2	59	7	3	2	6	11	2	2	7	31	6	2	1
Radiococcus											1							
Scenedesmus		2	1	1	1	9	0.5	13	3	17	8	7	1	2	4	2	0.2	64
Schizochlamys						0.3												
Schroederia			0.2	0.3	0.2			0.2	1			1	0.2	0.5		0.5		7
Scourfieldia															0.3			0.3
Selenastrum						1		0.2		0.3	0.2			1	1			
Sorastrum					1	1					3							
Sphaerocystis														3	2			
Sphaerozosma																		
Spermatozopsis				0.2			0.2		1		0.3	0.2						
Spondylosium			0.3	13	0.2	7				2	8	1		5	0.3	1		
Staurastrum		1	0.2	28	0.2	19		0.2			9	4	0.2	9	16		8	
Staurodesmus																		
Stichococcus				1														
Tetraëdron			1	0.3	3	11	0.2	6	1	3	4	4	0.3	0.5	1			19
Tetrastrum		0.3		0.5	0.2	1		0.2		0.3	1		0.2	2	0.3			5
Treubaria																		5
Trochiscia																	2	
Ulothrix							0.2											
Westella				0.3		6		1	2	1	4			1	2			
Xanthidium					0.3	10		0.2		1	24			0.2				
Unid. Chlorophyceae		0.2	1	7		19		5	0.2		3	1		11	7	1	0.3	56

1979	[Clearwater]	Basshaunt	Bigwind	Blue Chalk	Buck	Chub	Crosson	Dickie	Glen	Gullfeather	Harp	Jerry	Little Clear	Red Chalk (east)	Red Chalk (main)	Solitaire	Walker	[Bay of Quinte (B)]
BACILLARIOPHYCEAE	max. (mm^3/m^3)																	
Achnanthes			0.3							1								
Amphora								2										14
Asterionella		13	25	22	89	73	29	91		4	48	146	15	25	45	11	12	991
Attheya																		
Cocconeis																		
Coscinodiscus																		557
Cyclotella		185	13	481	43	12	8	273	652	48	223	64	528	295	385	148	10	54
Cymbella																		
Diatoma					13													277
Eunotia			1	6	7	0.3	0.2	3	1					0.2	2			
Fragilaria			3	1				0.2		3	19				0.2			211
Frustulia																		
Gomphonema											0.2							
Melosira			6	0.3	10	23		274		73	38			12	1			15653
Meridion														0.3	0.2			
Navicula			1			1		5				1		1	0.5			2
Nitzshia		1		1		6		3	2	2	7	4	1	2	0.3		0.3	12
Pinnularia																		
Rhoicosphaenia																		
Rhizosolenia			2		22	11		70	3	15	276	123	1	26	7		13	35
Skeletonema																		
Stenopterobia																		
Stephanodiscus				1		1				3		2			0.2			949
Surirella																		
Synedra		3	3	5	2	1		6	4	8	58	16		6	6	1	3	355
Tabellaria		28	133	110	288	86	110	1033	2	2	276	224	8	49	39	74	24	323
Unid. Diatoms					0.3	1		4		0.3								
XANTHOPHYCEAE																		
Isthmochloron				1		0.3					3					2		
Ophiocytium										2								
Pseudopolyedriopsis																		

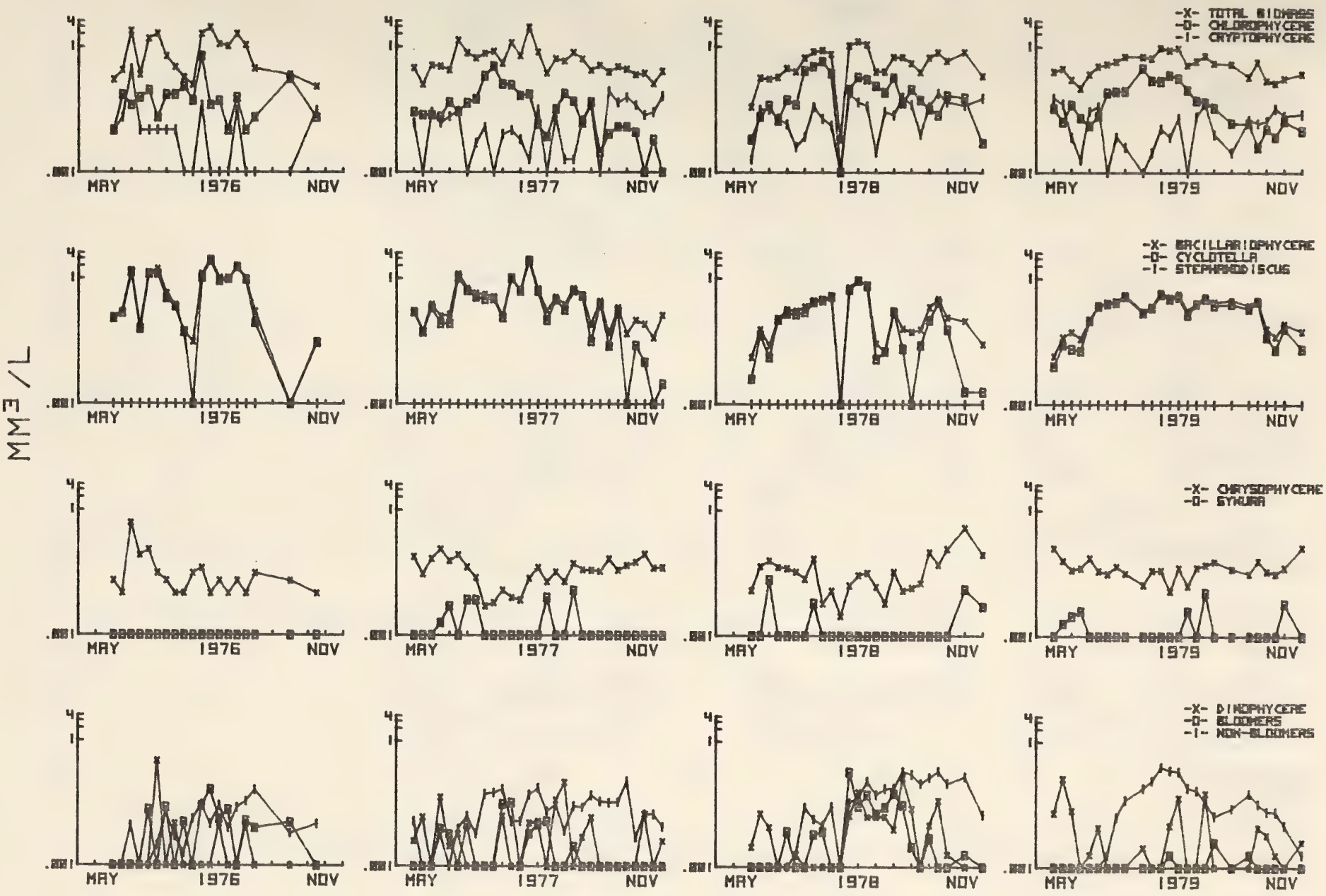
The next 16 pages (pp.28-43) contain plots (note the logarithmic scale) of the dominant classes and genera of all 16 lakes for the May-November periods of 1976-1979. Total phytoplankton biomass is also shown and blue-green algae have been divided into two groups: bloom forming genera (Microcystis, Aphanizomenon, Coelosphaerium, Gomphosphaeria, Anabaena, Oscillatoria, Lyngbya, and Gloeotrichia) and the non-bloom forming genera.

Lake	Page
Blue Chalk Lake	28
Red Chalk Lake, Main Basin	29
Red Chalk Lake, East Basin	30
Harp Lake	31
Jerry Lake	32
Dickie Lake	33
Chub Lake	34
Glen Lake	35
Basshaunt Lake	36
Buck Lake	37
Solitaire Lake	38
Little Clear Lake	39
Gullfeather Lake	40
Walker Lake	41
Bigwind Lake	42
Crosson Lake	43

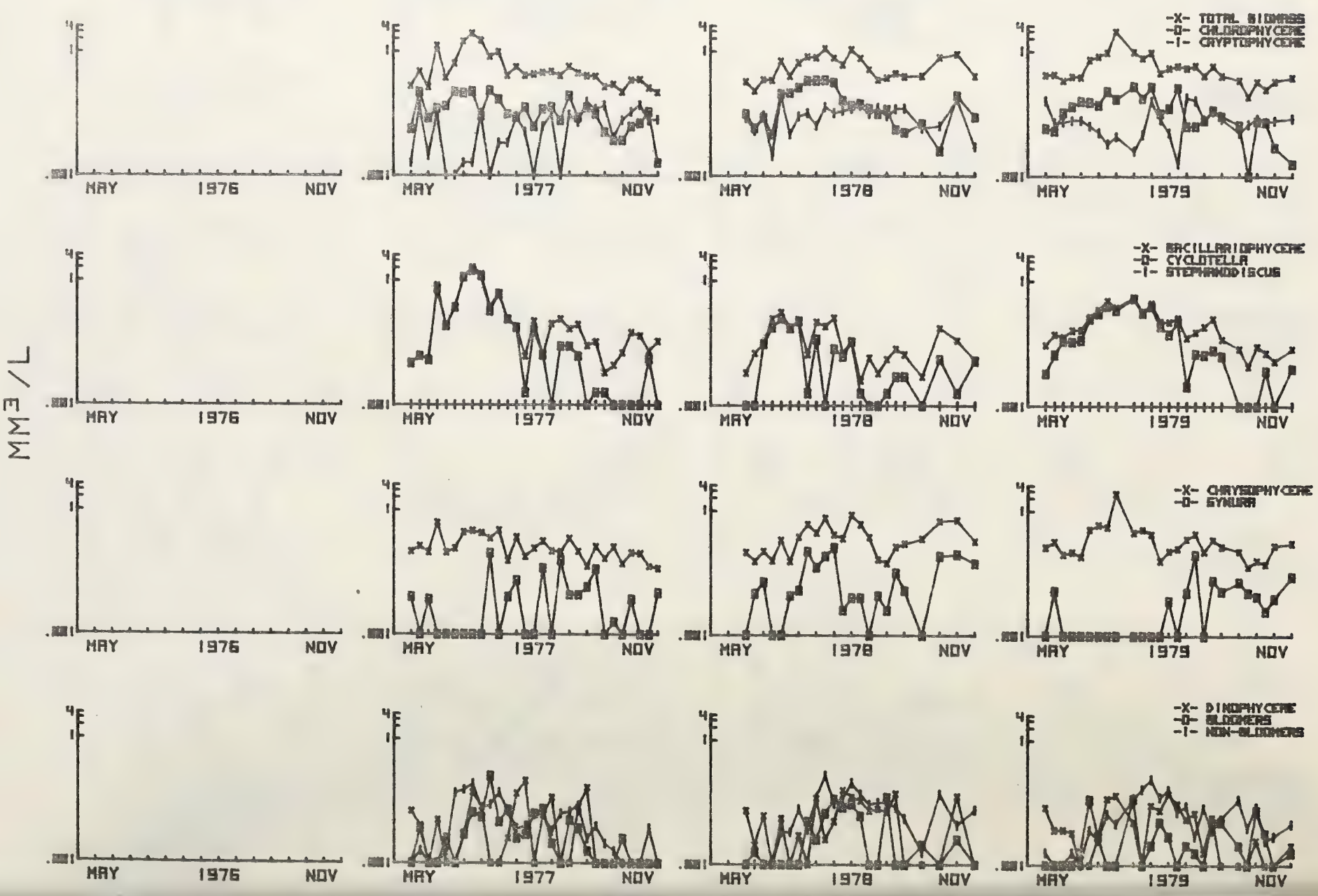
BLUE CHALK LAKE PHYTOPLANKTON BIOMASS 1976-1979



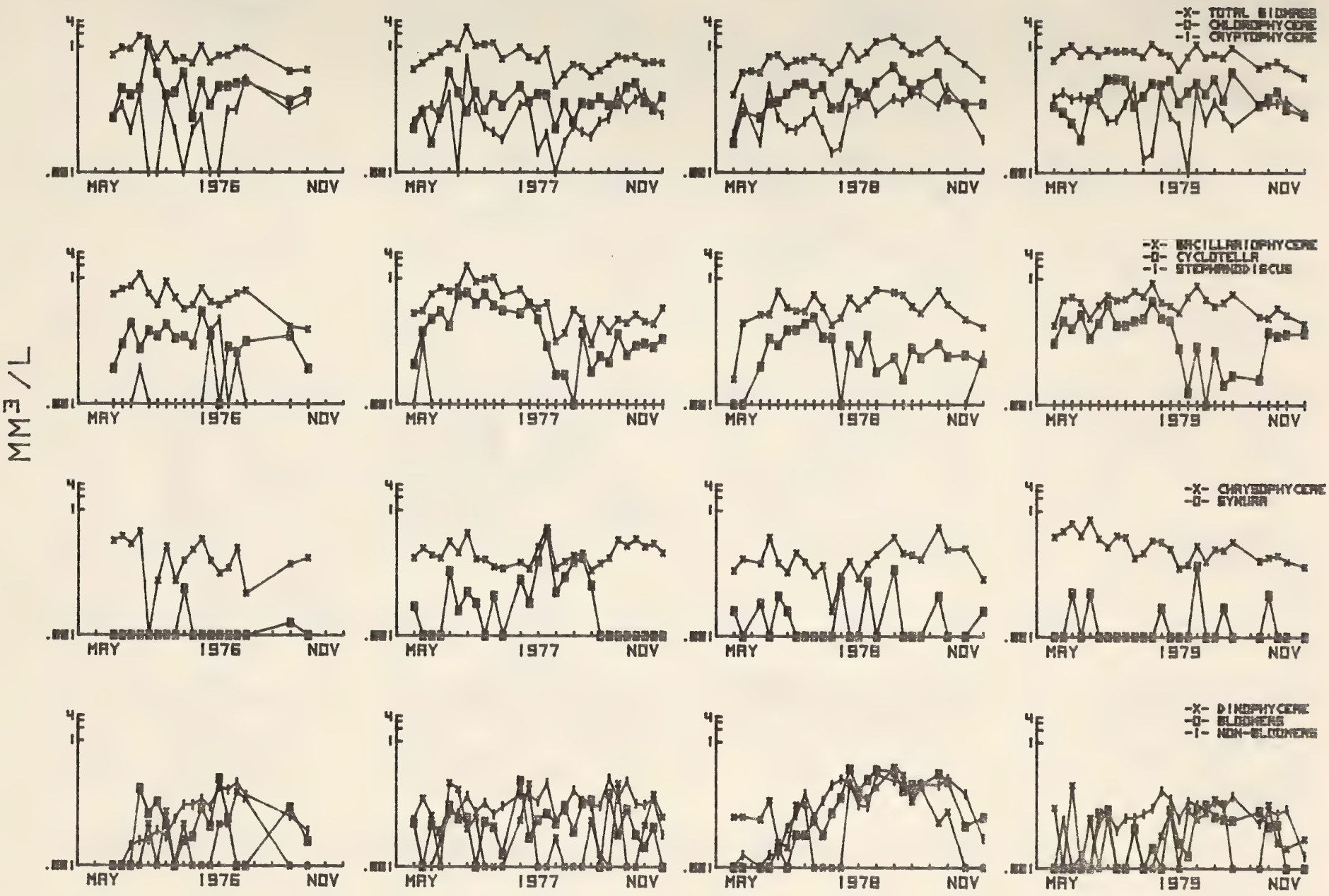
RED CHALK LAKE MAIN PHYTOPLANKTON BIOMASS 1976-1979



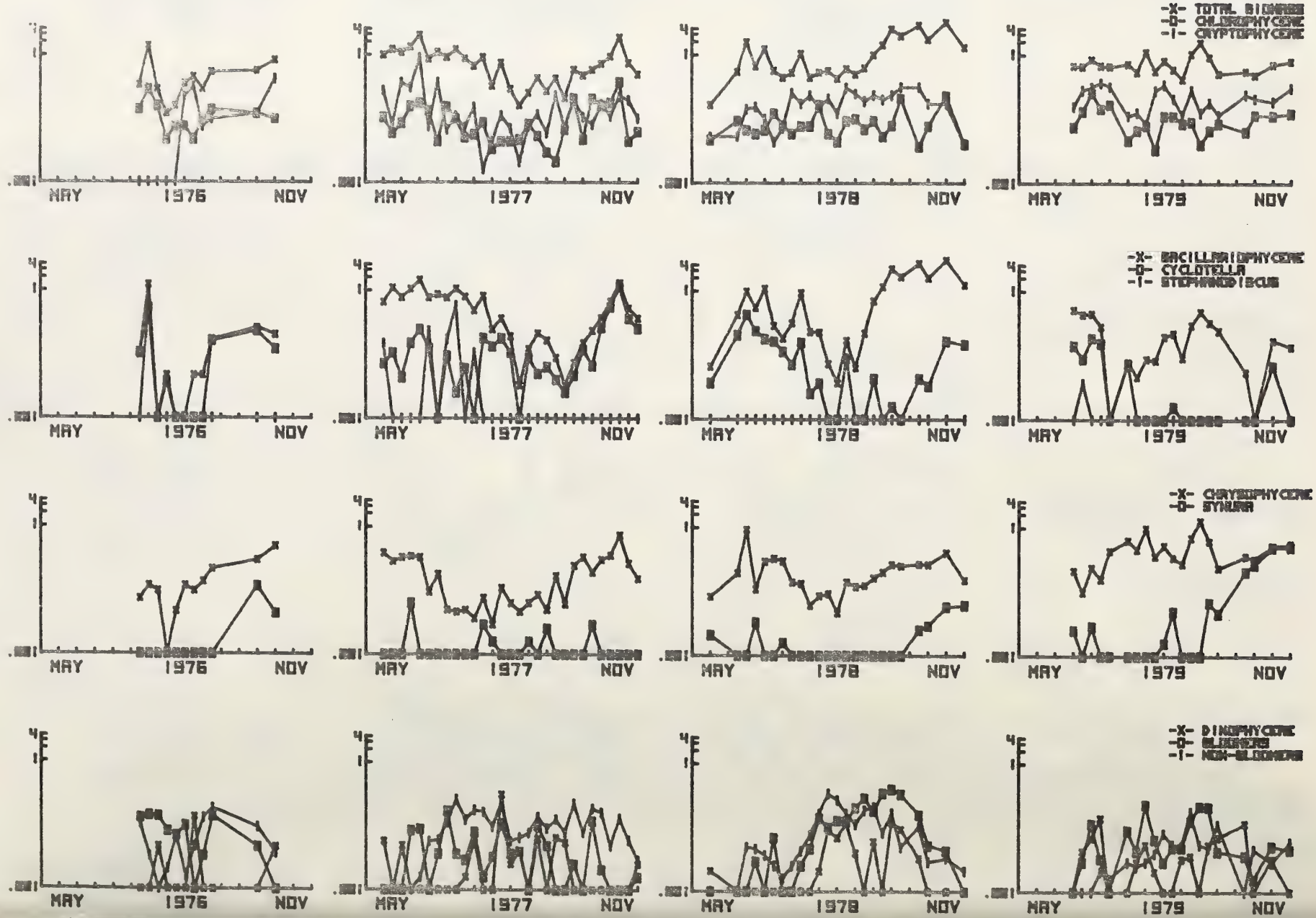
RED CHALK LAKE EAST PHYTOPLANKTON BIOMASS 1977-1979



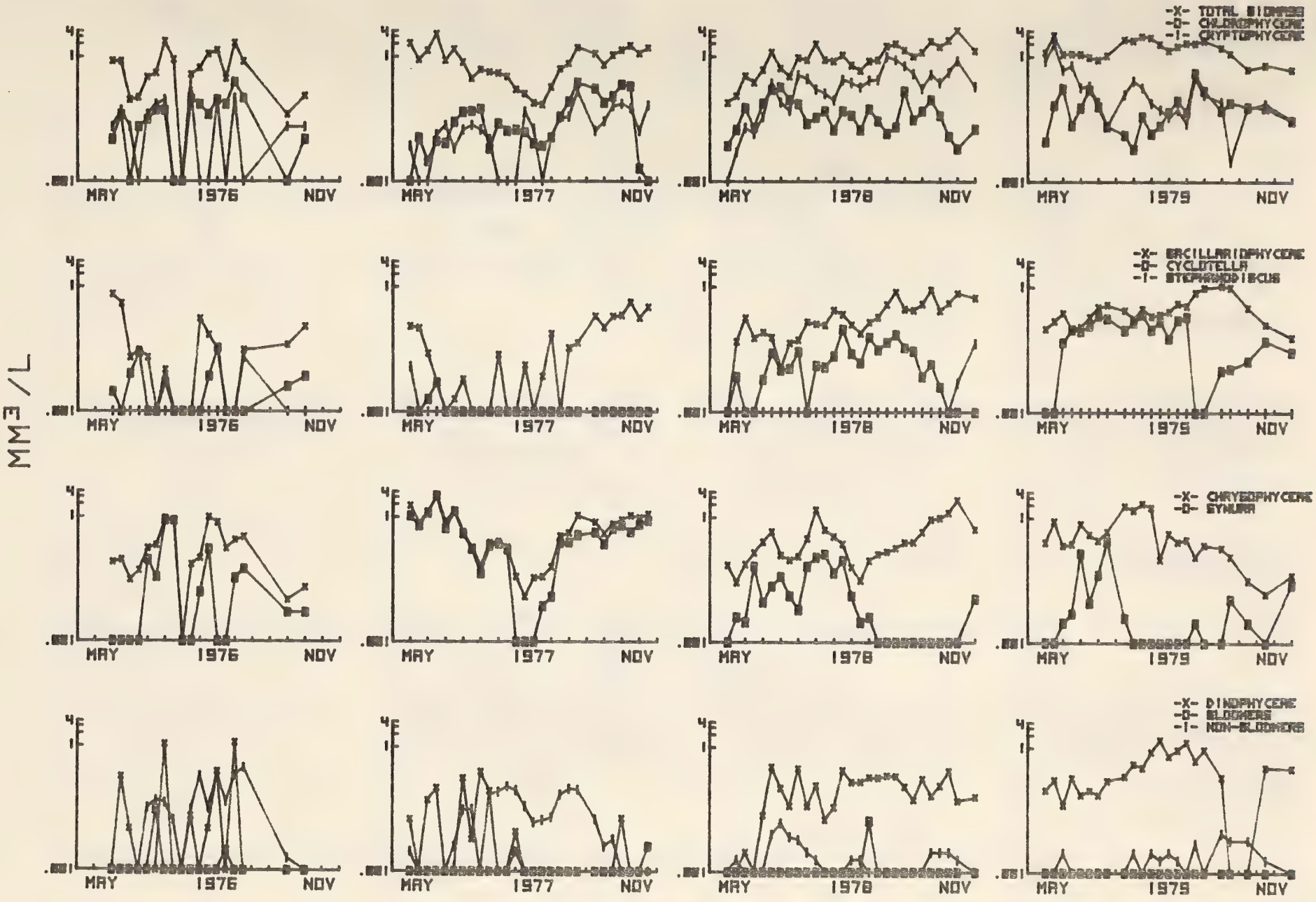
HARP LAKE PHYTOPLANKTON BIOMASS 1976-1979



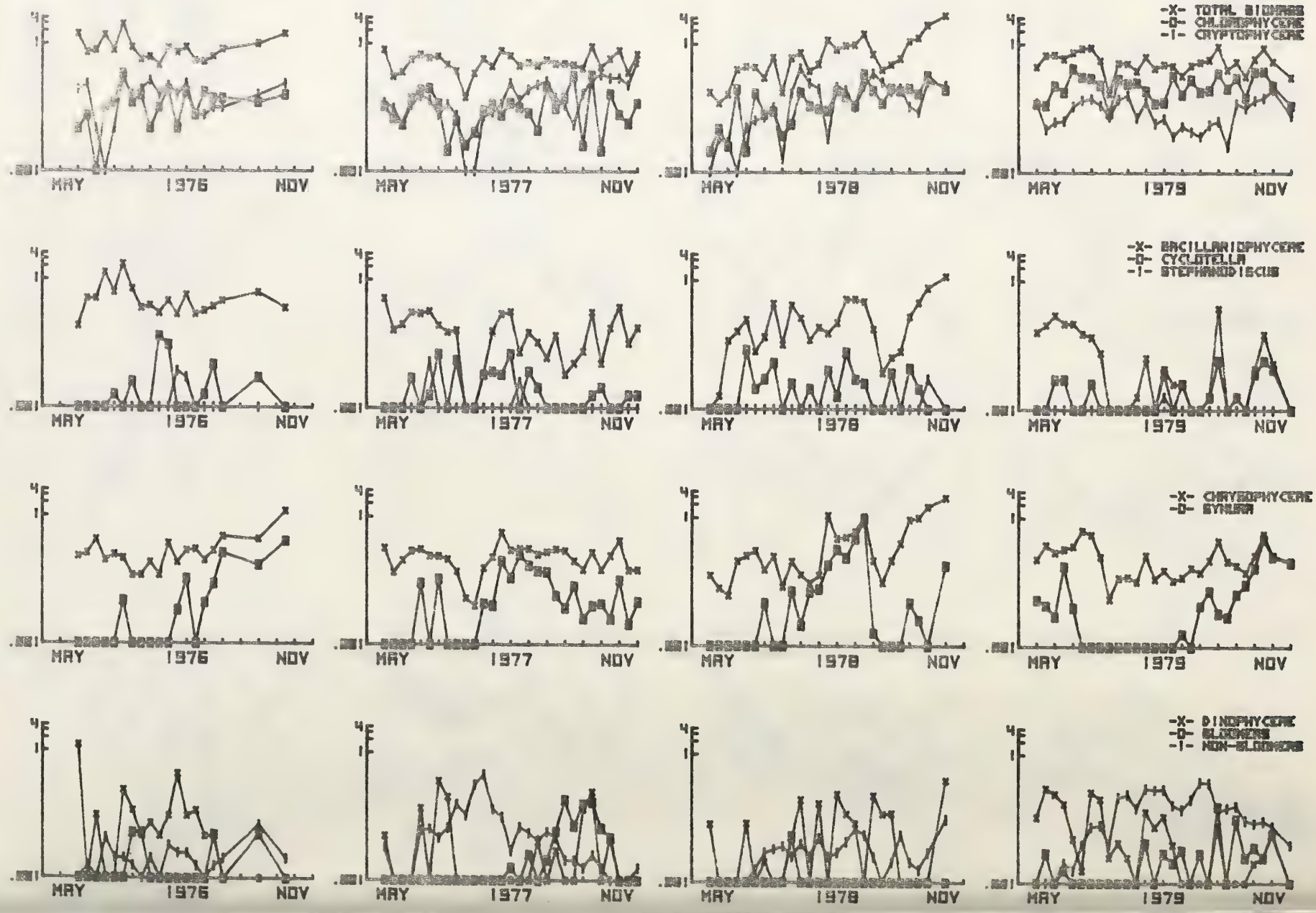
JERRY LAKE PHYTOPLANKTON BIOMASS 1976-1979

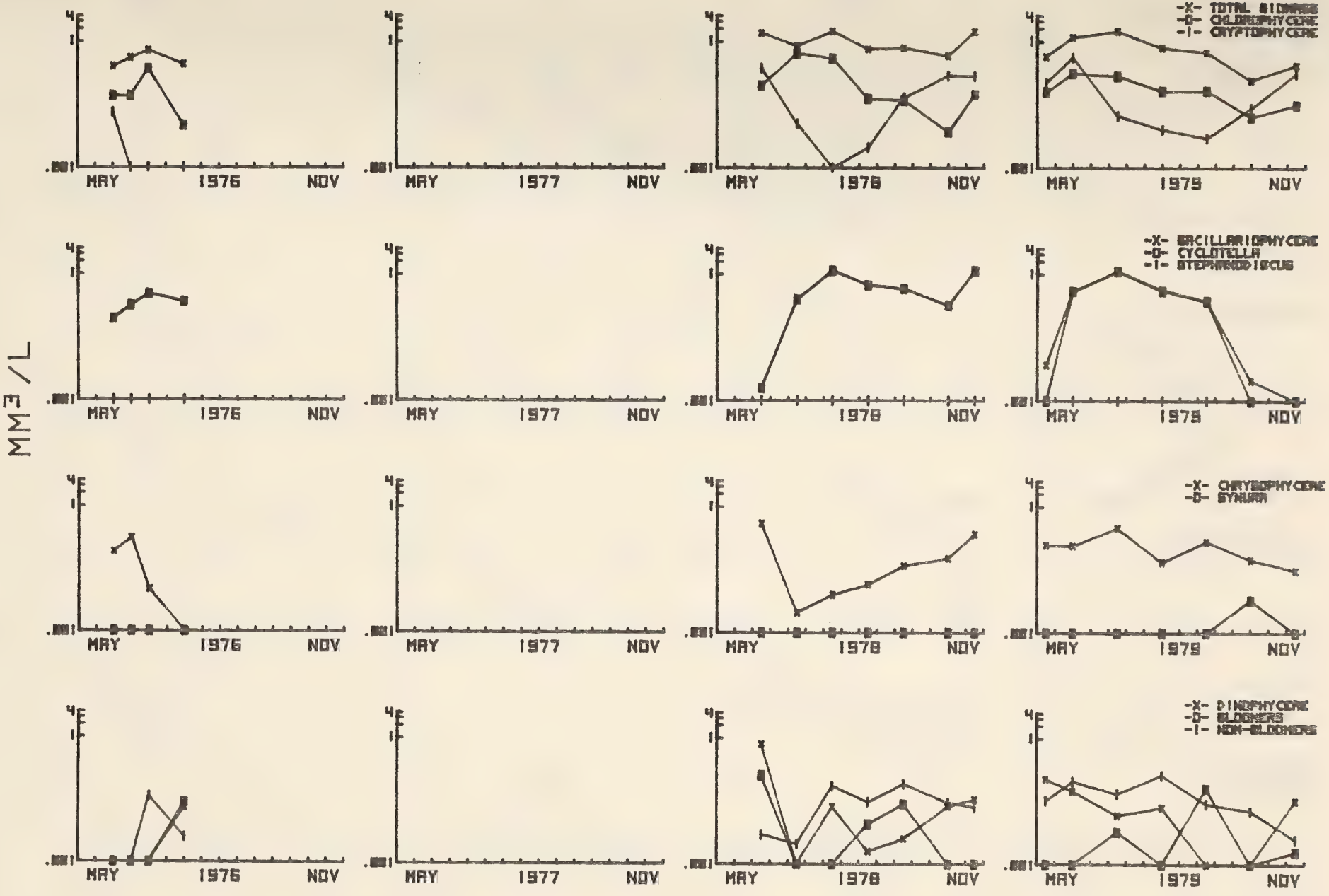


DICKIE LAKE PHYTOPLANKTON BIOMASS 1976-1979

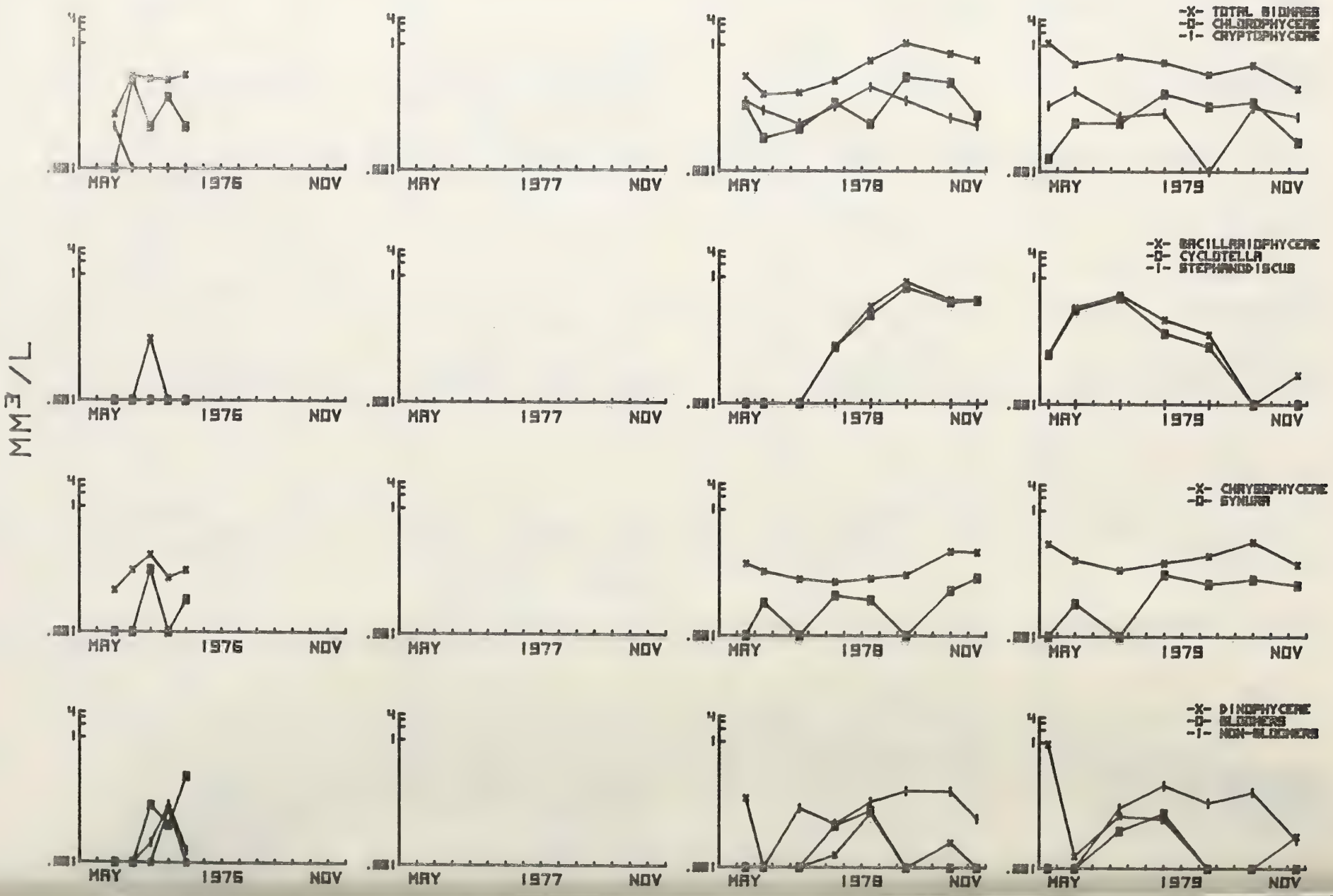


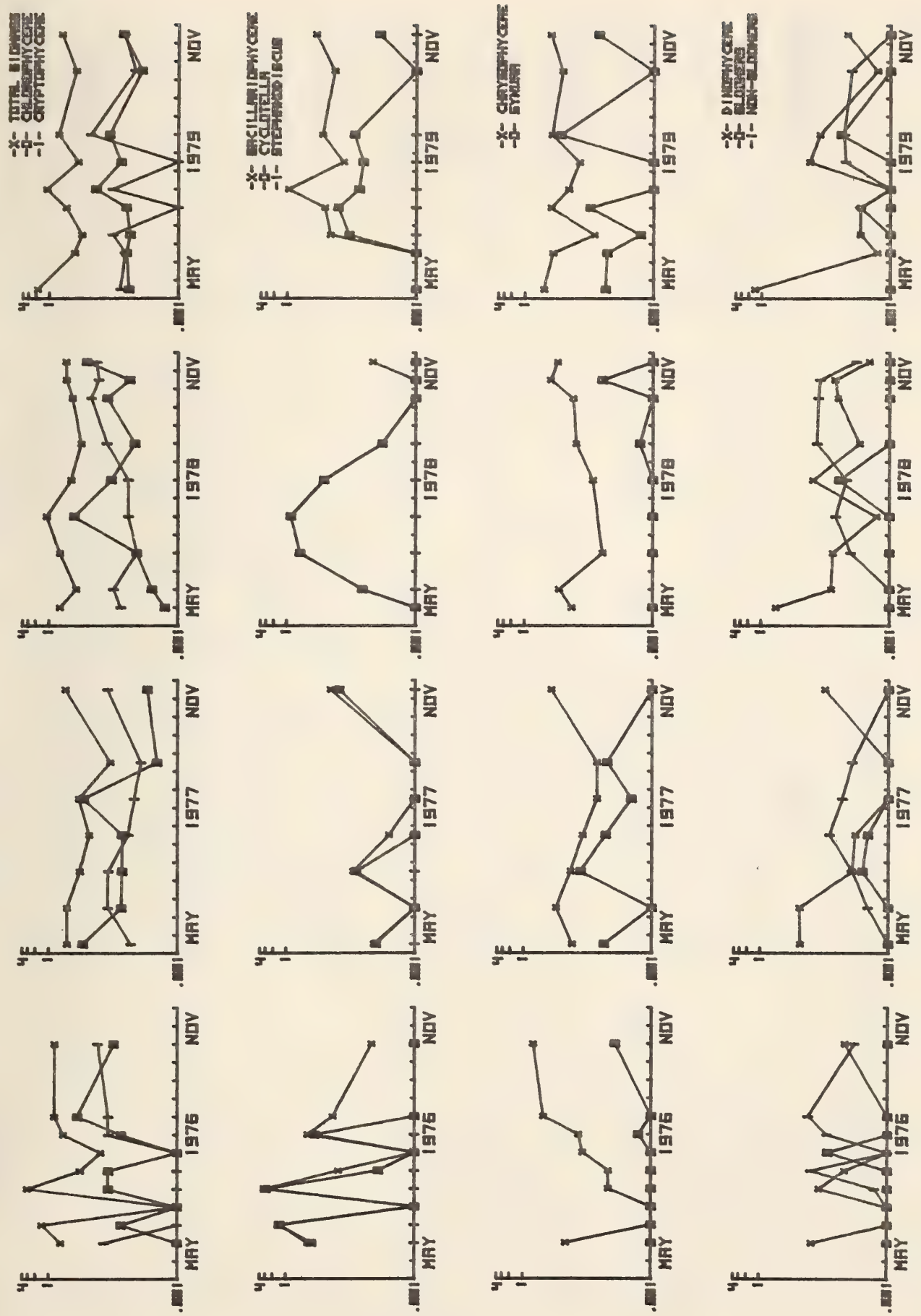
CHUB LAKE PHYTOPLANKTON BIOMASS 1976-1979



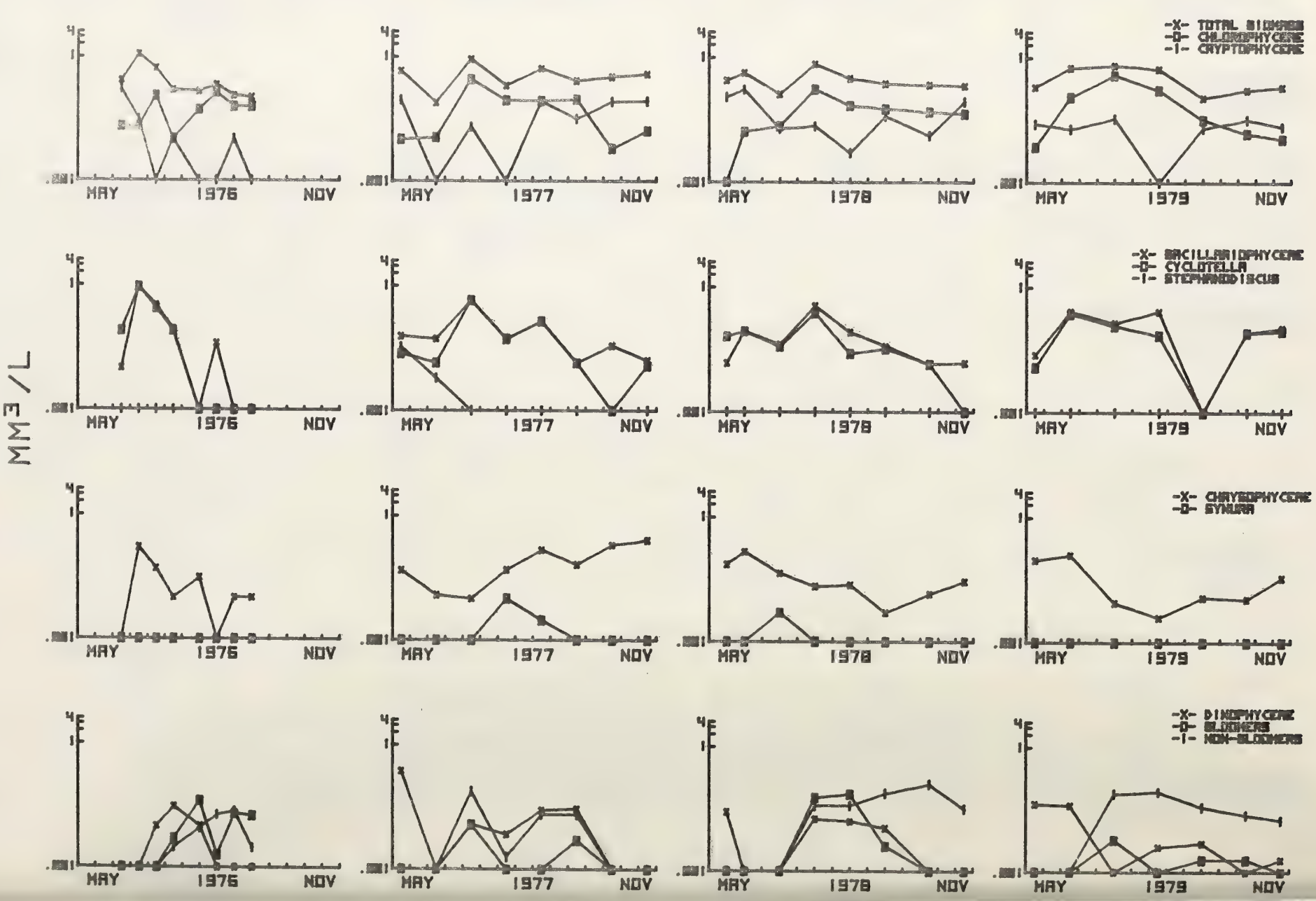

GLEN LAKE PHYTOPLANKTON BIOMASS 1976-1979
MM3/L
MAY
1976
NOV
1977
1978
1979
-X- TOTAL BIOMASS
-D- CHLOROPHYCEAE
-I- CRYPTOPHYCEAE
-X- BACILLARIOPHYCEAE
-D- CYCLOTELLA
-I- STEPHANODISCUS
-X- CHRYSOPHYCEAE
-D- SYNURA
-X- DINOPHYCEAE
-D- BLOOMERS
-I- NON-BLOOMERS

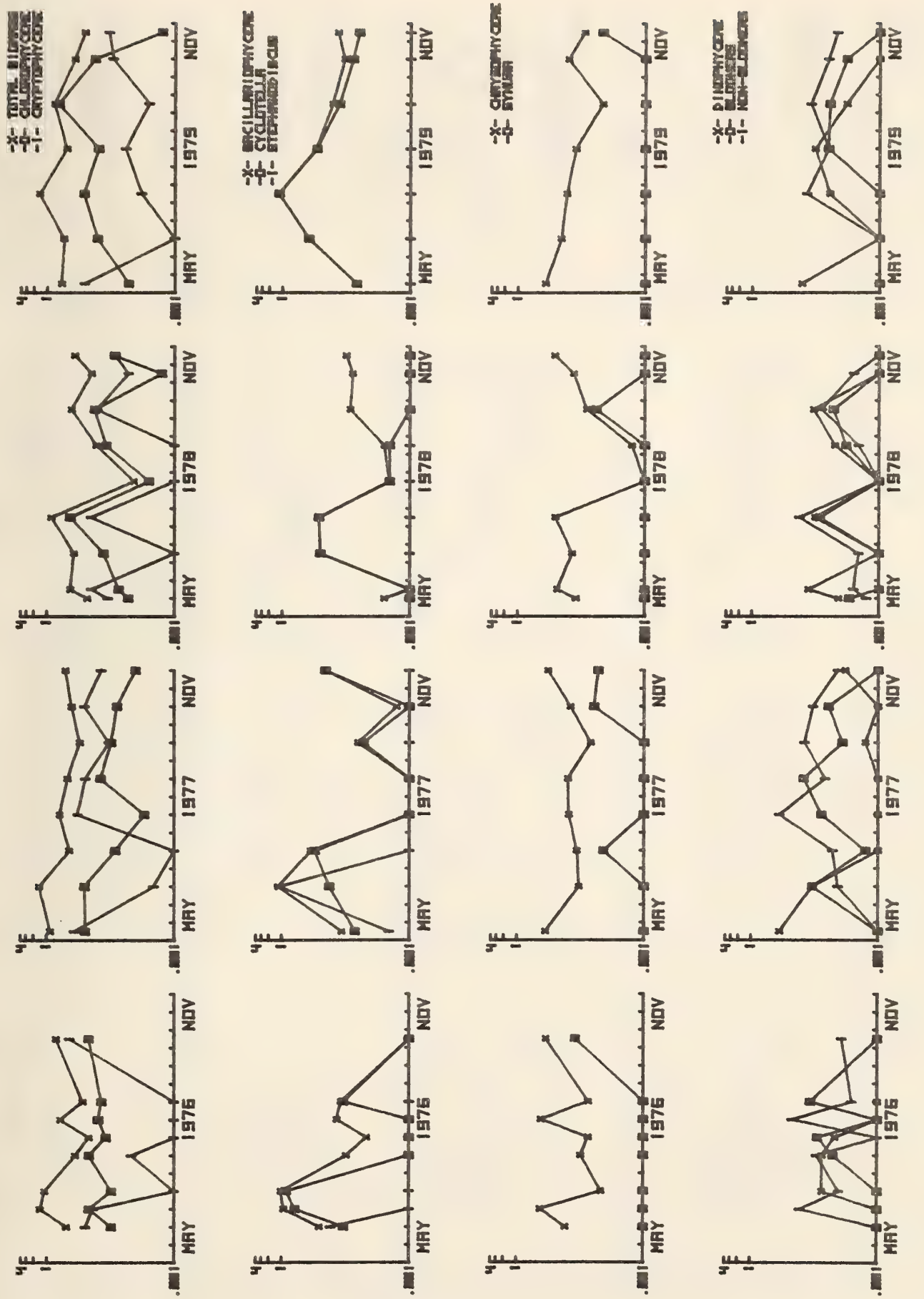
BASSHAUNT LAKE PHYTOPLANKTON BIOMASS 1976-1979

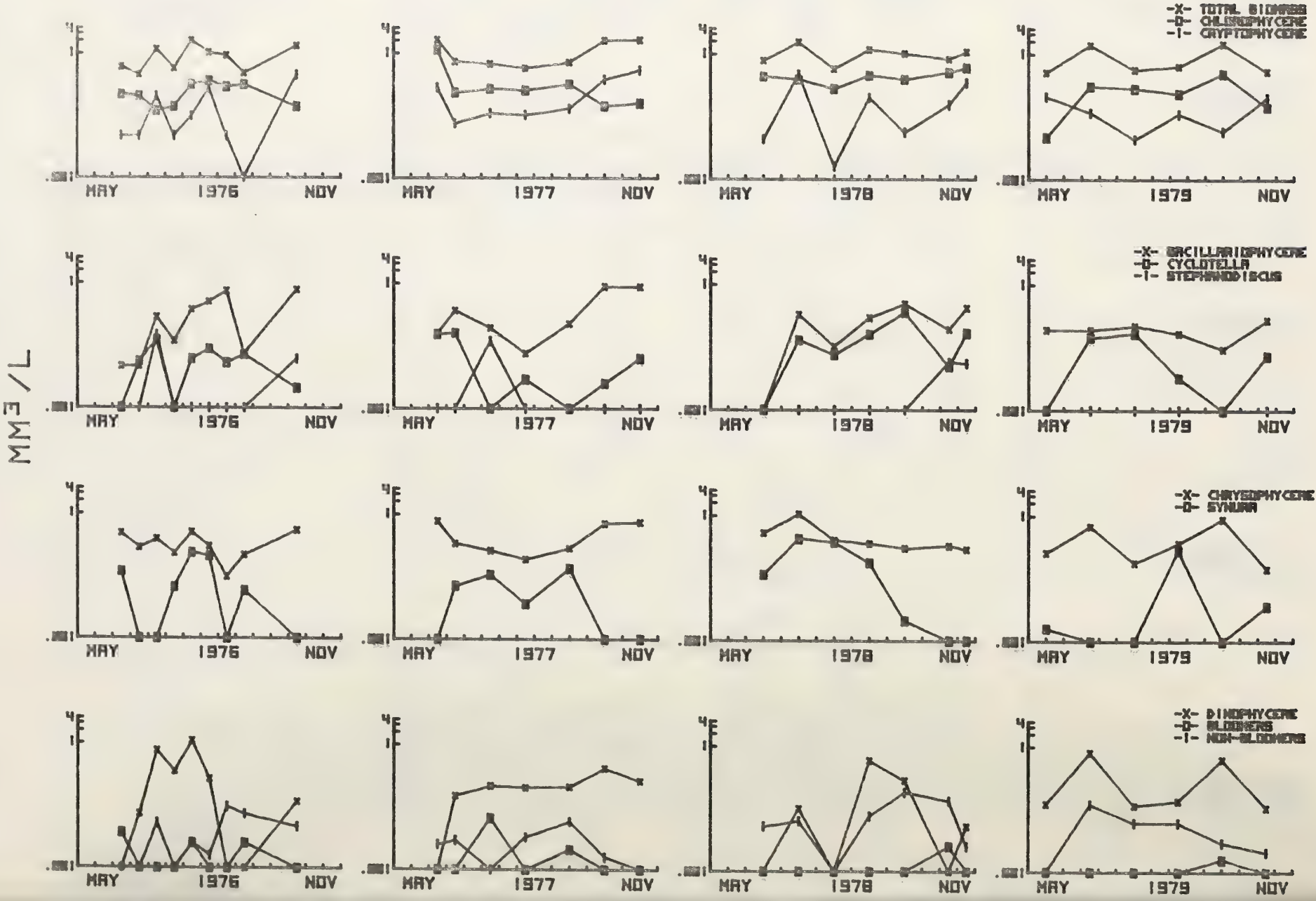



BUCK LAKE PHYTOPLANKTON BIOMASS 1976-1979
MM3/L
MAY
NOV
1976
1977
1978
1979

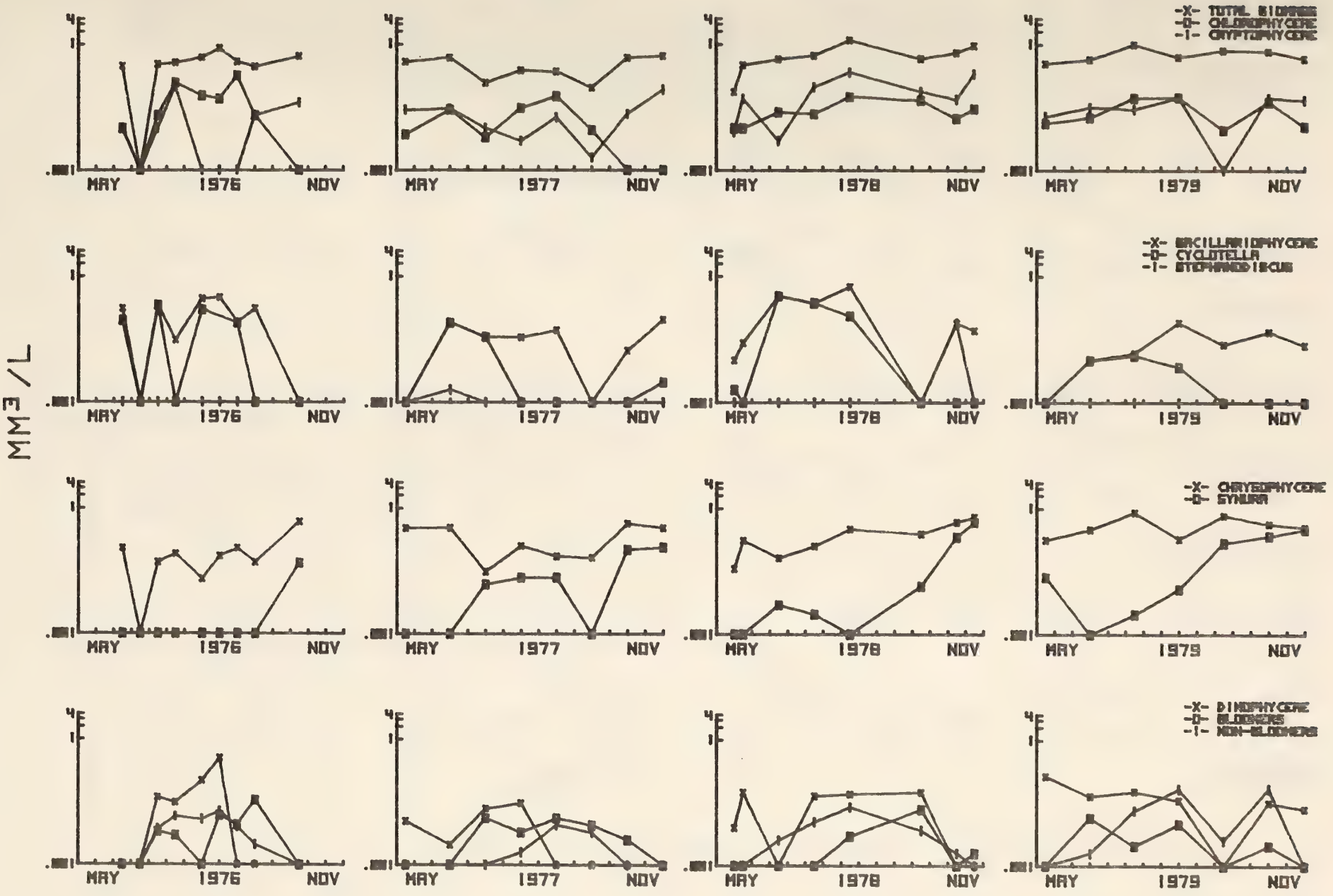
SOLITAIRE LAKE PHYTOPLANKTON BIOMASS 1976-1979



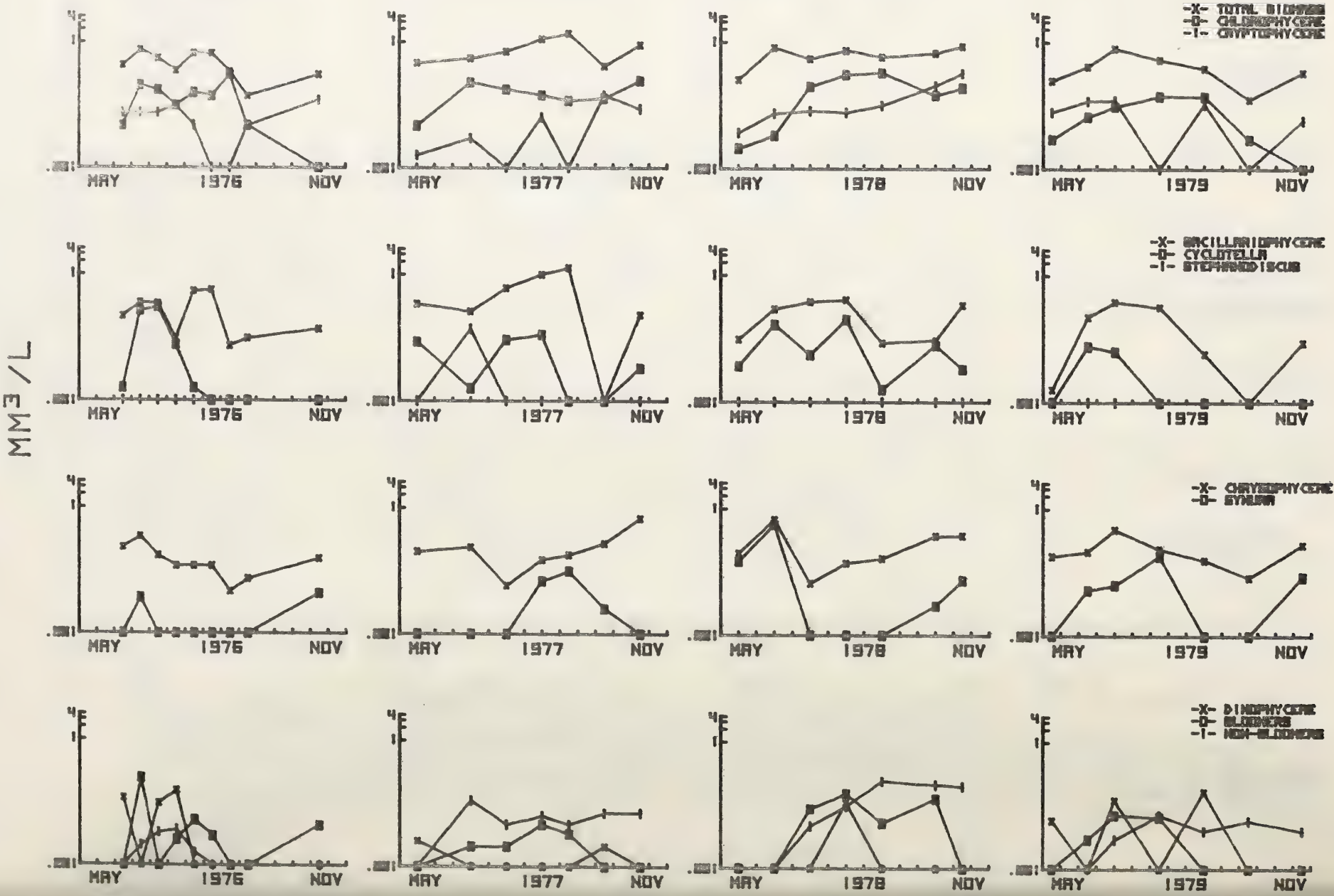

LITTLE CLEAR LAKE PHYTOPLANKTON BIOMASS 1976-1979
MM3/L
MAY
NOV
1976
1977
1978
1979


GULLFEATHER LAKE PHYTOPLANKTON BIOMASS 1976-1979
MM3/L
MAY 1976 NOV
MAY 1977 NOV
MAY 1978 NOV
MAY 1979 NOV
-X- TOTAL BIOMASS
-D- CHLOROPHYCEAE
-I- CRYPTOPHYCEAE
-X- BACILLARIOPHYCEAE
-D- CYCLOTELLA
-I- STEPHANODISCUS
-X- CHRYSOPHYCEAE
-D- SYNURA
-X- DINOPHYCEAE
-D- BLOOMERS
-I- NON-BLOOMERS

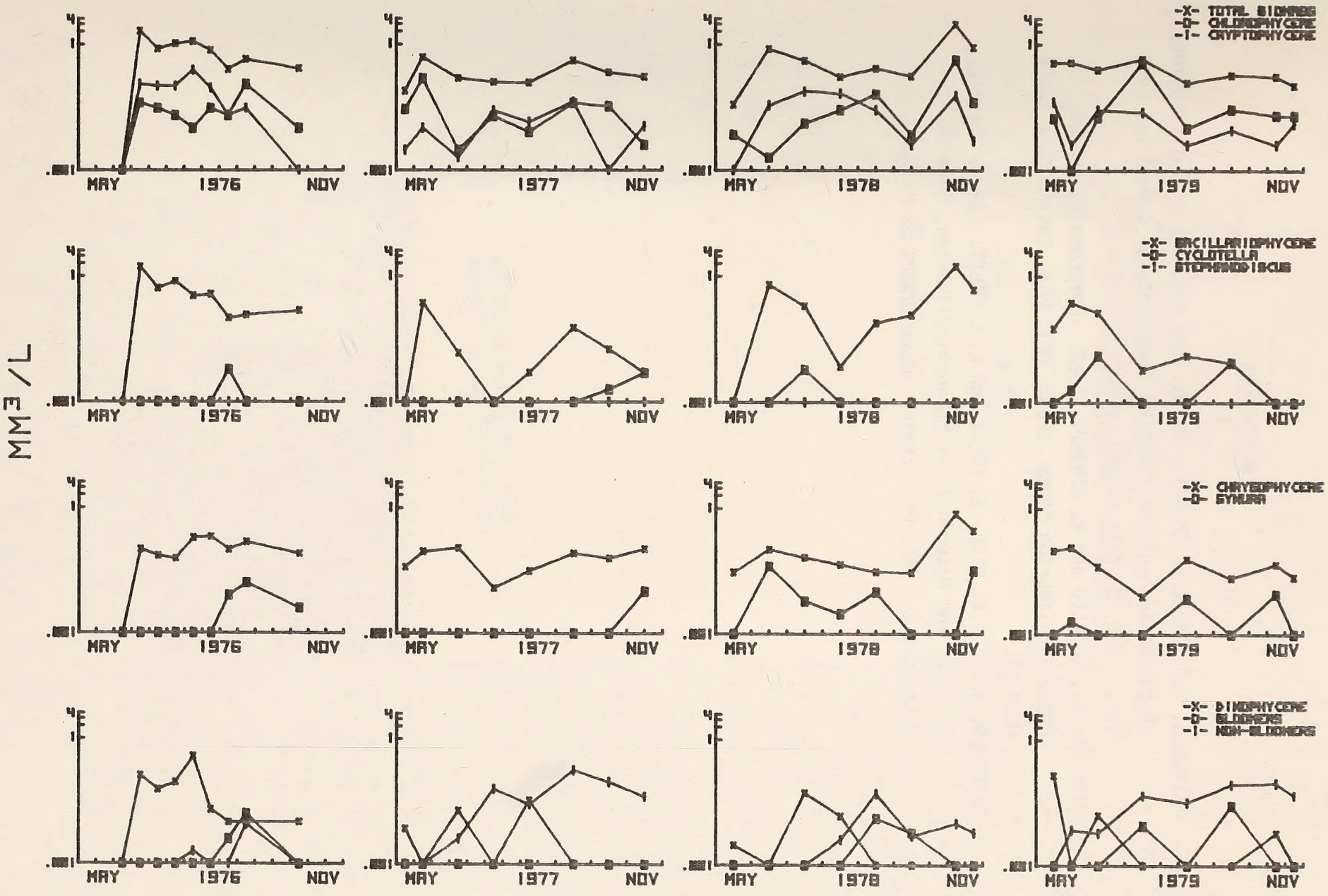
WALKER LAKE PHYTOPLANKTON BIOMASS 1976-1979



BIGWIND LAKE PHYTOPLANKTON BIOMASS 1976-1979



CROSSON LAKE PHYTOPLANKTON BIOMASS 1976-1979



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SCHEIDER, W.A., R.A. REID, B. LOCKE and L.D. SCOTT. 1983. Studies of lakes and watersheds in Muskoka-Haliburton, Ontario: Methodology. Ont. Min. Envir. Data Report DR 83/1.